CBNF 21, 3.8. 11/30/95

UNITED STATES ATTORNEY
Western District of Washington
3600 Seafirst Fifth Avenue Plaza
Seattle, Washington 98104-3190

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FOR YOUR [illegible]

November 30, 1995

BCK:dm
(bck/simpson/lodging.ntc)

Clerk of the Court
United States District Court
Western District of Washington
U.S. District Courthouse
1010 Fifth Avenue
Seattle, Washington 98104

Re: United States v. Simpson Tacoma Kraft Company, et al,
USDC, Western District of Washington, No. C91-5260T

Dear Clerk:

Enclosed please find a signed Amendment No. 1 to the Consent Decree (hereafter "the Amendment"). The Amendment seeks to amend a consent decree which was entered by the Honorable Jack E. Tanner, Senior United States District Judge, on December 13, 1991. Please lodge the Amendment with the Court.

Please note that this Consent Decree is subject to a 30 day public comment period after its publication in the Federal Register. In approximately 60 days, therefore, I anticipate that I will be filing a Motion to Enter the Consent Decree, after which the judge may sign and enter the Decree.

Thank you very much for your assistance. Please do not hesitate to contact me at 553-4426 if you have any questions.

Sincerely,

KATRINA C. PFLAUMER
United States Attorney

BRIAN C. KIPNIS
Assistant United States Attorney
Chief, Civil Division

Enclosure

cc w/o encl:

Simpson Tacoma Kraft Company:

Edward J. Reeve, Senior Counsel
Simpson Tacoma Kraft Company
1201 Third Avenue
Seattle, WA 98101

Champion International Corporation:

James Carraway
Senior Manager, Special Projects
Champion International Corporation
600 First Avenue, Suite 500
Seattle, WA 98104

State of Washington:

Christa L. Thompson
Assistant Attorney General
Natural Resources Division
Office fo the Attorney General
for the State of Washington
Highways-Licenses Building, MS PB-71
Olympia, WA 98504

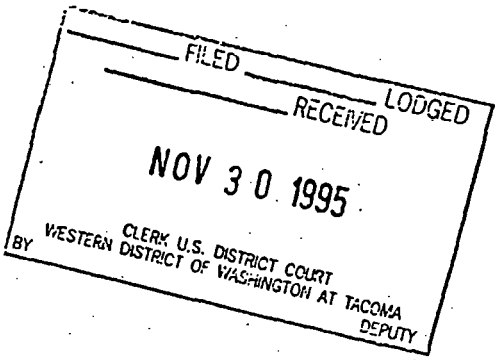
Attorney for Puyallup Tribe of Indians:

Richard Du Bey
Stoel Rives Boley Jones & Grey
One Union Square
Seattle, WA 98101

Attorney for Puyallup Tribe of Indians:

Robert Otsea
Muckelshoot Indian Tribe
39015 - 172nd Avenue SE
Auburn, WA 98002

Honorable Jack E. Tanner



FOR YOUR

IN THE UNITED STATES DISTRICT COURT
FOR WESTERN DISTRICT OF WASHINGTON
AT TACOMA

UNITED STATES OF AMERICA, ON BEHALF OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, THE UNITED STATES DEPARTMENT OF THE INTERIOR, AND THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, STATE OF WASHINGTON; PUYALLUP TRIBE OF INDIANS; MUCKLESHOOT INDIAN TRIBE, Plaintiffs, v. SIMPSON TACOMA KRAFT COMPANY, CHAMPION INTERNATIONAL CORPORATION, AND STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES, Defendants.	No. C91 - 5260T COMMENCEMENT BAY NEARSHORE/ TIDEFLATS SUPERFUND SITE; ST. PAUL WATERWAY PROBLEM AREA CONSENT DECREE AMENDMENT NO. 1

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WA Bar Number 15667
U.S. Department of Justice
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BACKGROUND

A. On December 13, 1991, the Court entered a federal consent decree providing for the cleanup of contaminated sediments in the St. Paul Waterway Problem Area under the federal Superfund law, resolving natural resource damage claims for this Problem Area against Simpson Tacoma Kraft Company (Simpson), Champion International Corporation (Champion) and the Washington State Department of Natural Resources (DNR), and providing for long term monitoring of the 17 acre cleanup and habitat restoration area (Consent Decree or Federal Consent Decree). Simultaneously with entering the Consent Decree, the parties, with the exception of EPA, entered into a Settlement Agreement, Exhibit C to the Consent Decree, to settle natural resource damage claims against Simpson, Champion and DNR for the St. Paul Waterway Problem Area.

B. On December 30, 1991, Simpson, Champion, DNR and the Washington State Department of Ecology (Ecology) entered into an amendment of a State Consent Decree (Wa. State Dept. of Ecology v. Simpson Tacoma Kraft Co. and Wa. State Dept. of Natural Resources, Pierce County Superior Court No. 87-2-07673-9, December 24, 1989) (the State Consent Decree) concerning the St. Paul Waterway Problem Area. The State Consent Decree preceded the Federal Consent Decree and approved the cleanup of contaminated sediments in the St. Paul Waterway Problem Area under applicable state law. In the amendment, the parties to the State Consent Decree recognized the Federal Consent Decree and confirmed, under paragraph 8 of the amendment to the State Consent Decree, that the State Consent Decree "shall not provide a basis for any natural resource damages claims or liabilities and that any such claims with respect to the St. Paul Waterway Problem Area are fully settled (subject to paragraph 99 [of the Federal Consent Decree]) under the Federal Consent Decree."

C. Among other things, the Settlement Agreement under the Federal Consent Decree

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provided for construction of an additional restoration project in the Commencement Bay environment, to be planned jointly by Simpson and Champion, DNR, and the Natural Resource Trustees and implemented under a memorandum of agreement or cooperative agreement between the Natural Resource Trustees and the appropriate settling party or parties (Simpson, Champion and/or DNR). Under the Settlement Agreement, Simpson and Champion deposited $500,000.00 into a Commencement Bay Restoration Project Trust Fund (the Fund) to provide for the additional restoration project.

D. In September 1993, the Natural Resource Trustees, other Federal and State Agencies, Simpson and Champion (the Project Planning Group) selected and proposed a project called the Middle Waterway Shore Restoration Project (the Restoration Project) as the additional restoration project called for in the Settlement Agreement described above in paragraph C. The Planning Group selected the Restoration Project after considering several potential sites and projects, evaluating each for conformity with preliminary restoration criteria, for cost, and for functional connectivity to the 17 acre habitat restoration area on the St. Paul Waterway. The Project Planning Group selected the Restoration Project, in part, because of the group's expectation that the Restoration Project: (1) would provide valuable riparian and estuarine wetland/mudflat habitat in close proximity to the St. Paul Waterway habitat restoration area; (2) did not appear to be exposed to contamination that would jeopardize the Restoration Project's long-term ecological value; and (c) could provide valuable information for planning future restoration projects in the Commencement Bay Environment. The proposed Restoration Project is located along the southeastern shore of the Middle Waterway on property owned by Simpson (the Restoration Property). The Restoration Property is adjacent to, and includes a portion of, one of the few remaining original mudflats in Commencement Bay.

E. Simpson submitted permit applications for the Restoration Project in September 1993

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and has certified that it has received all of the necessary federal and state permits for the Restoration Project. Thereafter, Simpson and the Natural Resource Trustees entered into a cooperative agreement to implement the Restoration Project and maintain it in perpetuity (Cooperative Agreement). Under the terms of this Cooperative Agreement, (1) Simpson agreed to implement the Restoration Project and maintain it in perpetuity, (2) the Trustees agreed to reimburse Simpson for costs incurred in developing and implementing the Restoration Project, (3) Simpson agreed to place a restrictive covenant on the deed to the Restoration Property to make the land available for restoration and habitat use in perpetuity (Deed Restriction), and (4) the Trustees agreed to pay $625,000.00 to Simpson as compensation for the diminution in value of the Restoration Property as a result of Simpson's obligations under the Cooperative Agreement, including Simpson's incurring of otherwise unreimbursable expenses in association with the design, selection and implementation of the Restoration Project, the placement of the Deed Restriction on the Restoration Property, and Simpson's agreement to pay the property tax liability allocable to the Restoration Property. This Cooperative Agreement is attached to this Amendment as Enclosure No. 1, and by this reference incorporated herein and made a part of this Amendment to the Consent Decree, except that this Amendment supersedes the payment terms of Schedule 1 of the Cooperative Agreement.

F. This Amendment to the Consent Decree incorporates the terms of a settlement of claims by the Natural Resource Trustees against Simpson and Champion for natural resource damages as a result of releases of hazardous substances (as that term is defined in 42 U.S.C. § 9601(14) and RCW 70.105D.020(5)) into the Commencement Bay Environment for which Simpson and Champion may be responsible and have not yet settled. It extends the previous settlement under the Consent Decree of natural resource damage claims by the Natural

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Resource Trustees against Simpson and Champion for the St. Paul Waterway Problem Area to include the Commencement Bay Environment, and fully settles with respect to Simpson and Champion all federal, state and tribal claims for Natural Resource Damages with respect to the St. Paul Waterway Problem Area and the Commencement Bay Environment, as those terms are defined in paragraph 3 herein, subject to paragraph 99 of the Consent Decree as modified herein.

G. Although the Natural Resource Trustees have initiated but not yet completed a natural resource damage assessment for the Commencement Bay Environment, the Natural Resource Trustees have concluded that they can determine with a reasonable degree of reliability the level of damages appropriate to assign to Simpson and Champion for settlement purposes. The settlement of Natural Resource Damages provided in this Amendment is based upon extensive studies, including targeted natural resource data collection specifically requested of Simpson and Champion by the Trustees in the Consent Decree and other targeted natural resource data collection subsequently undertaken by the Trustees. The data indicated that injury to natural resources resulting from releases of hazardous substances from the Tacoma Kraft Mill principally occurred close to the mill in the St. Paul Waterway area, and chemicals of concern originating at the mill (including polychlorinated dibenzodioxins and polychlorinated dibenzofurans) were not detected at levels of concern in areas widely dispersed from the mill. The settlement builds in a premium for natural resource damage elsewhere in the Commencement Bay Environment to the extent there remains scientific uncertainty on this point.

H. Under the settlement provided in this Amendment, Simpson and Champion will perform restoration actions in Commencement Bay estimated by the parties to this Amendment to have a value over $1,000,000.00. These restoration actions include: (1)

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Making the Restoration Property along the Middle Waterway available for the Restoration Project outright (in lieu of receiving $625,000.00 from the Trustees as compensation for the diminution in value of the Restoration Property as a result of Simpson's obligations under the Cooperative Agreement); (2) Bearing a majority of the costs of developing and implementing the Restoration Project (in lieu of receiving full reimbursement from the Trustees of Restoration Project costs under the Cooperative Agreement); and (3) Paying the Trustees for oversight costs incurred with respect to the Commencement Bay Environment. The settlement will result (1) directly in the establishment of over three acres of intertidal, salt marsh and riparian habitat along the Middle Waterway, a high priority location for restoration in the Commencement Bay Environment and one in close proximity to the existing St. Paul Waterway habitat restoration area, (2) save the Trustees a cash outlay that would otherwise be needed for making the Restoration Property available for restoration and habitat use, and (3) make almost half of the $500,000.00 deposited in the Fund as a result of the previous Settlement Agreement available for the planning or implementation of another restoration project in the Commencement Bay Environment.

I. The parties to this Amendment recognize, and the Court by entering this Amendment to the Consent Decree finds, that this Amendment has been negotiated by the parties hereto in good faith, that its implementation will expedite the restoration of natural resources injured by releases of hazardous substances into the Commencement Bay Environment and will avoid prolonged and complicated litigation between the parties hereto, and that this Amendment to the Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed that, as provided for in Article XXIX, this Consent Decree be modified as follows:

1. Paragraph 27 is amended to include the following after "Area," and before "address"

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on line 13:

"and, in the case of Simpson and Champion, claims for Natural Resource Damages with respect to the Commencement Bay Environment,".

2. Paragraph 31(A) is amended and replaced with the following:

"Consent Decree" means this Decree and Appendices and Exhibits attached hereto and all Amendments and Exhibits attached to such Amendments.

3. Paragraph 31 is amended to include the following:

(AA) "Amendment Number 1" means the amendment to the Consent Decree incorporating the terms of a settlement of claims by the Natural Resource Trustees against Simpson and Champion for natural resource damages as a result of releases of hazardous substances (as that term is defined in 42 U.S.C. § 9601(14) and RCW 70.105D.020(5)) into the Commencement Bay Environment for which Simpson and Champion may be responsible and have not yet settled.

(BB) "Commencement Bay Environment" shall consist of the Site, as defined herein, plus areas of Commencement Bay between the Site and a line drawn from Point Defiance to Dash Point.

(CC) "Natural Resource Damages" shall mean damages, including costs of damages assessment, recoverable under Section 107 of CERCLA, Chapter 70.105D RCW, or other applicable law for injury to, destruction of, or loss of natural resources resulting from releases of hazardous substances into the Commencement Bay Environment.

4. Clause (ii) of Paragraph 32 is amended and replaced with the following:

"(ii) to restore habitat and natural resources with respect to past activities in the St. Paul Waterway Problem Area, and, in the case of Simpson and Champion, in the Commencement Bay Environment".

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5. Paragraph 34 is amended and replaced with the following:

The obligations of Settling Defendants to finance and perform the Work and to reimburse the United States for its Past Response Costs, Oversight Response Costs and Future Response Costs under this Consent Decree are joint and several. Simpson and Champion shall be jointly and severally liable for any Past Response Costs, Oversight Response Costs and Future Response Costs incurred by the Natural Resource Trustees with respect to injuries to natural resources outside of the St. Paul Waterway Problem Area but within the Commencement Bay Environment. In the event of the insolvency or other failure of any one or more Settling Defendants to implement the requirements of this Consent Decree, the remaining Settling Defendants shall complete all such requirements, provided however that DNR shall have no obligation to implement the requirements of this Consent Decree with respect to Natural Resource Damages outside of the St. Paul Waterway Problem Area but within the Commencement Bay Environment.

6. Paragraph 98 is amended to include the following after "following" and before ":"on line 14 of page 57:

"for all of the Settling Defendants".

7. Clause (C) of the term "Covered Matters" in Paragraph 98 is amended and replaced with the following:

(C) Covered Matters under subparagraphs (A) and (B) of this paragraph do not include the Middle Waterway Problem Area described in the ROD.

8. The term "Covered Matters" in Paragraph 98 is amended to include the following after subparagraph (C):

"Covered Matters" also means the following for Simpson and Champion only:

(D) With respect to the Commencement Bay Environment, liability for any and all civil

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claims available to the United States on behalf of the federal Natural Resource Trustees and the other Natural Resource Trustees under Sections 106 and 107 of CERCLA, Section 311 of the Federal Water Pollution Control Act, Chapter 70.105D RCW, Chapter 90.48 RCW, or any other federal, state, tribal or common law for damages on behalf of the public, including the Puyallup Tribe of Indians and the Muckleshoot Indian Tribe and their members, for injury to, destruction of, or loss of natural resources under federal, state, and tribal trusteeship resulting from releases of hazardous substances, and claims for recovery of Past Response Costs, Oversight Response Costs, and Future Response Costs incurred by the Natural Resource Trustees with respect to the Commencement Bay Environment.

9. Clause (i)(H) of Paragraph 99 is amended and replaced with the following:

(H) Liability under applicable federal, state, or tribal law or regulation for cleanup of contaminated sediments in the Middle Waterway Problem Area.

10. Clause (i)(J) of Paragraph 99 is amended and replaced with the following:

(J) With respect to DNR, liability for damages for injury to, destruction of, or loss of natural resources, including damages with respect to petroleum product releases occurring after July 1, 1990, and excluding damages with respect to the St. Paul Waterway Problem Area. With respect to Simpson and Champion, liability for injury to, destruction of, or loss of natural resources resulting from releases of hazardous substances into the Commencement Bay Environment occurring after the Effective Date of Amendment No. 1 to the Consent Decree.

11. Clause (C) of Paragraph 100 is renumbered (D) and a new Clause (C) is added to read as follows:

(C) With respect to Simpson and Champion, the Natural Resource Trustees further reserve their rights to institute proceedings in this action or in a new action seeking to compel Simpson and Champion to reimburse the Natural Resource Trustees for Natural

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Resource Damages in the Commencement Bay Environment if the Natural Resource Trustees find, based on these previously unknown conditions or information described in subparagaph (A), together with site-specific and any other relevant information, that there is injury to, destruction of, or loss of natural resources in the Commencement Bay Environment that was unknown at the time of entry of Amendment Number 1 to this Consent Decree and uncompensated for under the settlement provided by Amendment Number 1.

12. Paragraph 105 is amended and replaced with the following:

With regard to claims for contribution against Settling Defendants for matters addressed in this Consent Decree, the parties hereto agree that the Settling Defendants are entitled as of the effective date of this Consent Decree to such protection from contribution actions or claims as provided in CERCLA § 113(f)(2), 42 U.S.C. § 9613(f)(2), for matters addressed in subparagraphs (A) through (D) below. "Matters addressed" in this Consent Decree means:

(A) The sediment remedial action in and the natural resource damages with respect to the St. Paul Waterway Problem Area.

(B) Work performed in accordance with this Consent Decree and Monitoring Plan.

(C) EPA's and the Natural Resource Trustees' Past Response Costs and Oversight Response Costs that are reimbursed by the Settling Defendants.

(D) The Future Response Costs of EPA or the Natural Resource Trustees, if expended by them and reimbursed by the Settling Defendants.

With regard to claims for contribution against Simpson and Champion for matters addressed in this Consent Decree or any amendment thereto, the parties hereto agree that Simpson and Champion are also entitled as of the effective date of such amendment to this Consent Decree to such protection from contribution actions or claims as provided in CERCLA § 113(f)(2), 42 U.S.C. § 9613(f)(2), RCW 70.105D.080, and other applicable federal, state or

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tribal law for matters addressed in subparagraphs (E) through (F) below.

(E) The Natural Resource Damages with respect to the Commencement Bay Environment.

(F) The Natural Resource Trustees' Past Response Costs, Oversight Response Costs and Future Response Costs with respect to the Commencement Bay Environment.

13. The addresses of individual representatives of parties other than DNR provided in Paragraph 116 are amended and replaced with the following:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P. O. Box 7611
Ben Franklin Station
Washington, D.C. 20044

and

Director, Hazardous Waste Division
United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

As to EPA:

Karen Keeley or Alison Hiltner
EPA Project Coordinator
United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

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As to Simpson and Champion:

Edward J. Reeve
Senior Counsel
Simpson Tacoma Kraft Company
1201 Third Avenue
Seattle, Washington 98101

Kenneth S. Weiner or Konrad J. Liegel
Preston Gates & Ellis
701 Fifth Avenue, Suite 5000
Seattle, Washington 98104-7078

James Carraway
Senior Manager, Special Projects
Environmental Affairs
Champion International Corporation
One Champion Plaza
Stamford, CT 06921

Michael R. Thorp or Kimberly Seely
Heller Ehrman White & McAuliffe
1201 Pacific Avenue, Suite 1400
Tacoma, Washington 98402

As to the Federal Natural Resource Trustees:

Robert A. Taylor
National Oceanic and Atmospheric Administration
Damage Assessment and Restoration Center
7600 Sand Point Way N.W.
Seattle, Washington 98115-0070

Barry Stein
Department of the Interior
Regional Solicitor's Office
500 NE Mulnomah, Suite 607
Portland, Oregon 97232

As to the State:

Fred Gardner
Department of Ecology
P. O. Box 47600
Olympia, Washington 98504-7600

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As to the Puyallup and Muckleshoot Tribes:

Richard Du Bey
Special Environmental Counsel to the
Puyallup Tribe of Indians
Stoel Rives Boley Jones & Grey
3600 One Union Square, 600 University Street
Seattle, WA 98101

Robert Otsea
Muckleshoot Indian Tribe
39015 - 172nd Avenue SE
Auburn, WA 98002

IN ADDITION TO THE FOREGOING AMENDMENTS, it is further Ordered, Adjudged and Decreed that:

14. Settlement of Claims Against Simpson and Champion for Natural Resource Damages in the Commencement Bay Environment. In addition to the moneys previously provided by Simpson and Champion for settlement of Natural Resource Damages in the St. Paul Waterway Problem Area and for assessment and restoration activities elsewhere in the Commencement Bay Environment (estimated by the parties to this Amendment to have a value over $2,800,000.00), Simpson and Champion shall perform the following actions (estimated by the parties to this Amendment to have a value over $1,000,000.00):

(A) Except as provided in subparagraphs (C) and (D), Simpson shall make the Restoration Property along the Middle Waterway available to the Trustees for restoration and habitat use, in accordance with the Cooperative Agreement (except for the terms of Schedule 1 thereof), and shall assume all obligations as property owner under the Cooperative Agreement.

(B) Except as provided in subparagraphs (C) and (D), Simpson and Champion shall

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develop, implement, and bear all costs incident to: (1) All phases of the Restoration Project under the Cooperative Agreement, including planning design, permitting, sampling, final project design, construction and planting in accordance with the final plans and specifications for the Restoration Project, and post-construction monitoring in accordance with the monitoring and adaptive management plan for the Restoration Project; (2) All obligations as property owner under the Cooperative Agreement, including payment of taxes and maintenance of the Restoration Property; and (3) Other obligations that arise as a consequence of permit conditions associated with the Restoration Project.

(C) The Trustees shall contribute $275,000.00 toward the funding of the Restoration Project, to be drawn down from the Court Registry Account established under the Consent Decree. The Trustees shall authorize counsel for the United States to make application to the Court for payment of such amount, minus any moneys that have previously been paid to Simpson pursuant to the Cooperative Agreement, to Simpson from the Court Registry Account within ten (10) business days after entry of this Consent Decree Amendment No. 1 or completion of the construction and planting of the Restoration Project, whichever is later in time. Such payment shall be made to Simpson in accordance with the Order Directing the Deposit of Natural Resource Damages into the Registry of the Court entered in this matter on March 12, 1992.

(D) The Trustees, as opposed to Simpson and Champion, shall remain responsible for covering the costs of certain construction contingency and adaptive management

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activities at the Restoration Property as described below:

(1) Simpson shall be responsible for the first $19,000.00 in change orders and other cost overruns associated with construction of the Restoration Project. The Trustees shall reserve and make available from funds deposited in the Court Registry Account established under the Consent Decree $10,000.00 for further change orders and other cost overruns concurred in by the Trustees. Simpson and the Trustees shall mutually agree upon the expenditure of any of the funds described in this paragraph to cover unanticipated costs that occur during construction of the Restoration Project. In the event that such unanticipated costs are likely to exceed the $29,000.00 set aside by Simpson and the Trustees, and prior to the expenditure being incurred, Simpson and the Trustees shall meet and discuss the matter, and use their best efforts to agree on an appropriate course of action.

(2) The Trustees shall reserve and make available $25,000.00 for adaptive management activities, as defined in Section IV.C.3(b) of the Cooperative Agreement, through the third growing season of the Restoration Project to ensure adequate opportunity exists for site improvements. At the end of the third growing season, the Trustees are free to make available for other restoration projects in the Commencement Bay Environment whatever portion of the $25,000.00 remains unspent under the terms of this subparagraph. Simpson shall cooperate with the Trustees in determining what further construction adaptive

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management activities may be appropriate at the Restoration Property.

(E) Simpson and Champion shall reimburse the Trustees the sum of $75,000.00 for their governmental response/oversight costs for natural resource damage claims as provided for in paragraph V.C.2.(b) of Exhibit C to the Consent Decree. Payment shall be made within thirty (30) days of entry of this Amendment No. 1 in the amounts specified and with payees and addresses as identified in writing by the Trustees. After payment is made, the Trustees shall have no further claim against Simpson and Champion for natural resource damage assessment costs with respect to the Commencement Bay Environment.

15. Balance of Funds Remaining in the Court Registry Account. Simpson and Champion acknowledge that the Trustees have satisfied all obligations the Trustees may have had to Simpson and Champion under paragraph V.B.3(b) of Exhibit C to the Consent Decree. Subject to the Trustees' obligations under paragraph 14(D) of this Amendment, the Trustees may use the balance of the funds remaining in the Court Registry Account in connection with the planning or implementation of an additional project or projects to restore, replace or acquire the equivalent of injured natural resources in the Commencement Bay Environment.

16. Settlement of Claims Against DNR for Natural Resource Damages. This Amendment is not intended to alter any the terms of the Consent Decree that apply to DNR and shall be interpreted accordingly. Simpson and Champion hereby waive their rights, under Section XXIX of the Consent Decree, to written notification and written approval of any future settlement of claims against DNR for Natural Resource Damages in the Commencement Bay

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Environment.

17. Effect of Settlement. Nothing in this Amendment shall be construed to create any rights in, or grant any cause of action to, any person not a party to this Amendment. Each of the parties hereto expressly reserves any and all rights, including any right to contribution, defenses, claims, demands, and causes of action which each party may have with respect to any matter, transaction, or occurrence relating in any way to the Commencement Bay Environment against any person not a party hereto. Nothing in this Amendment shall limit the right of Simpson and Champion to assert claims for contribution at any time against non-settling parties.

18. Lodging and Opportunity for Public Comment. This Amendment shall be lodged with the Court for a period of not less than thirty (30) days and shall be made available for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(D)(2), 28 C.F.R. § 50.7 and RCW 70.105D.040(4)(a). The United States reserves the right to withdraw or withhold its consent if the comments regarding the Amendment disclose facts or considerations that indicate that the Amendment is inappropriate, improper, or inadequate. The State of Washington reserves the right to withdraw or withhold its consent if the comments regarding the Amendment disclose facts or considerations that demonstrate that the proposed settlement would not lead to a more expeditious cleanup of hazardous substances as provided in RCW 70.105D.040(4)(a). Simpson and Champion consent to the entry of this Amendment without further notice.

19. Voidability of Agreement. If for any reason the Court should decline to approve this Amendment in the form presented, this agreement is voidable at the sole discretion of any

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party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

20. Effective Date. The effective date of this Amendment shall be the date upon which it is entered by the Court, except as otherwise provided in this Paragraph. The covenants not to sue, provided for in Article XVIII of the Consent Decree, shall take effect with respect to the additional Covered Matters identified in Paragraph 8 of this Amendment upon the effective date of this Amendment, or upon receipt by the Natural Resource Trustees of the recorded Deed Restriction required under the Cooperative Agreement, whichever comes later.

21. Retention of Jurisdiction. This Court shall retain jurisdiction over this matter for the purpose of enabling any of the settling parties under this Amendment to apply to the Court at any time for such order, direction, and relief as may be necessary or appropriate for interpretation, construction, implementation, or modification of this Amendment or the Cooperative Agreement, or to effectuate or enforce compliance with their terms, or to resolve disputes in accordance with Section XV of the Consent Decree.

22. Signatories. Each undersigned representative of Simpson and Champion, the Assistant Attorney General for Environment and Natural Resources of the Department of Justice, and each representative of the State of Washington, the Puyallup Tribe of Indians and the Muckleshoot Indian Tribe certifies that he or she is fully authorized to enter into the terms and conditions of this Amendment and to execute and legally bind such party to this document.

23. Agreement Not to Oppose Entry of Amendment. Simpson and Champion hereby agree not to oppose entry by this Court of this Amendment in the form presented or to challenge

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any provision of this Amendment in the form presented unless the United States has notified Simpson and Champion in writing that it no longer supports entry of the Amendment in the form presented.

24. Agent For Service of Process. Simpson and Champion shall identify, on the attached signature page, the name, address and the telephone number of an agent who is authorized to accept service of process by mail on behalf of that party with respect to all matters arising under or relating to this Amendment. Simpson and Champion hereby agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

SO ORDERED THIS _____ day of _____, 1995.

_____

JACK E. TANNER
United States District Judge

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Washington, D.C. 20530
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THE UNDERSIGNED SETTLING PARTIES enter into this Amendment to the Consent Decree in the matter of United States v. Simpson Tacoma Kraft Company, et al., relating to the Commencement Bay Environment.

FOR THE UNITED STATES OF AMERICA

By: _____ Dated: 11/20/95

LOI J. SCHIFFER
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. ~~20530~~

By: _____, AUSA, for: Dated: 11/29/95

THOMAS W. SWEGLE
Attorney
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20536

By: _____ Dated: 11/29/95

BRIAN C. KIPNIS
Assistant United States Attorney
3600 Seafirst Fifth Avenue Plaza
800 Fifth Avenue
Seattle, Washington 98104

Thomas W. Swegle
WA Bar Number 15667
U.S. Department of Justice
Washington, D.C. 20530
(202) 514-3143

By: Randall F Smith Dated: June 27, 1995

Director, Hazardous Waste Division
EPA, Region 10
Seattle, Washington 98101

By: [signature] Dated: June 15, 1995

Assistant Regional Counsel
EPA, Region 10
Seattle, Washington 98101

Thomas W. Swegle
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Washington, D.C. 20530
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SIMPSON TACOMA KRAFT COMPANY

By: for R.P. Simmons Dated: 7/12/95

For matters arising under or relating to the Consent Decree or Amendment, service may be made on Edward J. Reeve, Senior Counsel, Simpson Tacoma Kraft Company, 1201 Third Avenue, Seattle, WA 98101. Telephone number: (206) 224-5045.

Thomas W. Swegle
WA Bar Number 15667
U.S. Department of Justice
Washington, D.C. 20530
(202) 514-3143

CHAMPION INTERNATIONAL CORPORATION

By: Jim W. Swanson Dated: 6-24-95

For matters arising under or relating to the Consent Decree or Amendment, service may be made on

United States Corporation Company, 600 First Avenue, Suite 500, Seattle, Washington 98104 Telephone number: (206) 754-9333

Thomas W. Swegle
WA Bar Number 15667
U.S. Department of Justice
Washington, D.C. 20530
(202) 514-3143

WASHINGTON DEPARTMENT OF NATURAL RESOURCES

By: Kaleen Cottingham Dated: 8/24/95

For matters arising under or relating to the Consent Decree, service may be made on the Office of the Attorney General, Christa L. Thompson, Assistant Attorney General, Natural Resources Division, Highways-Licenses Building, M.S. PB-71 Olympia, WA 98504

Thomas W. Swegle
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Washington, D.C. 20530
(202) 514-3143

THE WASHINGTON DEPARTMENT OF ECOLOGY

By: _____ Dated: 6/2/95

By: Mary McCrea Dated: 7/6/95
Assistant Attorney General
State of Washington

Thomas W. Swegle
WA Bar Number 15667
U.S. Department of Justice
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(202) 514-3143

THE PUYALLUP TRIBE OF INDIANS

By: _____ Dated: 7/13/95

Thomas W. Swegle
WA Bar Number 15667
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Washington, D.C. 20530
(202) 514-3143

THE MUCKLESHOOT INDIAN TRIBE

By: _____ Dated: 6-19-95

Thomas W. Swegle
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Washington, D.C. 20530
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ENCLOSURE NO. 1

COOPERATIVE AGREEMENT BETWEEN SIMPSON TACOMA KRAFT COMPANY AND THE COMMENCEMENT BAY NATURAL RESOURCE TRUSTEES REGARDING MIDDLE WATERWAY SHORE RESTORATION PROJECT

I. PARTIES

This Agreement is entered into on May 31, 1995 by and between the Simpson Tacoma Kraft Company or the Simpson Tacoma Land Company, a subsidiary of the Simpson Tacoma Kraft Company (Simpson), and the Commencement Bay Natural Resource Trustees, consisting of: The Puyallup Tribe of Indians (Puyallup Tribe); the Muckleshoot Indian Tribe (Muckleshoot Tribe); the Washington Department of Ecology (Ecology) as lead state natural resource trustee; the Washington Department of Natural Resources (WDNR); the Washington Department of Fisheries and Wildlife; the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce; and the U.S. Department of the Interior (DOI) (Trustees). NOAA and DOI collectively constitute the federal Trustees. For purposes of this Agreement, Simpson and the Trustees shall be collectively referred to as the "Parties."

II. RECITALS

A. Governmental Parties

The above governmental parties are Trustees under applicable state, federal and tribal law. The Trustees enter into this Agreement in furtherance of their general responsibilities to replace and restore natural resources of the Commencement Bay environment injured by releases of hazardous substances.

B. Simpson Tacoma Kraft Company

Simpson is the present owner/operator of the paper mill on the St. Paul Waterway (Tacoma Kraft Mill) and the owner of the property on the Middle Waterway that is the subject of this Agreement (the Restoration Property), a legal description of which is described in Exhibit A attached hereto and incorporated herein. Simpson enters into this Agreement in furtherance of its corporate commitment to work cooperatively with interested

parties in improving the Commencement Bay environment and to ensure that restoration actions occur efficiently and effectively and achieve the most restoration that is possible with the available funds.

C. **Consent Decree and Settlement Agreement**

1. In 1991, Simpson, Champion International Corporation (Champion), WDNR, the United States, on behalf of the U.S. Environmental Protection Agency (EPA) and the federal Trustees, Ecology, on behalf of the state Trustees, and the Muckleshoot Tribe and Puyallup Tribe, on their own behalf, entered into a consent decree in the U.S. District Court for the Western District of Washington entitled "Commencement Bay Nearshore/Tideflats Superfund Site; St. Paul Waterway Problem Area Consent Decree" (Consent Decree). The Consent Decree, inter alia, approved the cleanup of contaminated sediments in the St. Paul Waterway Problem Area under the federal Superfund law, resolved natural resource damage claims for this area against Simpson, Champion and WDNR, and provided for long term monitoring of the 17 acre cleanup and habitat restoration area.

2. Simultaneously with entering into the Consent Decree, the Parties, WDNR and Champion entered into a settlement agreement entitled "Settlement Agreement Between Champion International Corporation, Simpson Tacoma Kraft Company, Washington Department of Natural Resources and The Commencement Bay Natural Resource Trustees Regarding St. Paul Waterway Natural Resource Damage" (Settlement Agreement) to settle natural resource damage claims against Simpson, Champion and WDNR for the St. Paul Waterway Problem Area. Among other things, the Settlement Agreement provided for construction of an additional restoration project(s) in the Commencement Bay environment, to be planned jointly by Simpson and Champion, WDNR, and the Trustees. Under the Settlement Agreement, Simpson and Champion deposited $500,000 into a Commencement Bay Restoration Project Trust Fund (the Fund) to fund the additional restoration project(s).

3. Specifically, Section V.B.3(b) of the Settlement Agreement provided that the Trustees establish one or more natural resource restoration projects, selected from a range of alternatives identified by the Trustees in consultation with Simpson, Champion and other interested entities, in the Commencement Bay environment. Section V.B.3(b) further specified the Trustees' intent that the restoration project or projects be developed under a memorandum of agreement or cooperative agreement between the Trustees and the appropriate settling party or parties (Simpson, Champion and/or WDNR).

D. Planning and Permitting Background

1. In February 1993, the Trustees, other federal and state agencies, Simpson and Champion (the Project Planning Group) commenced planning for the additional restoration project in the Commencement Bay environment. The Project Planning Group considered several potential sites and projects, evaluating each under preliminary restoration criteria, for cost, and for functional connectivity to the 17 acre habitat restoration area on the St. Paul Waterway. The Project Planning Group identified a restoration project along the southeastern shore of the Middle Waterway on property owned by Simpson as the preferred restoration project. This property is adjacent to, and includes, a portion of one of the few remaining original mudflats in Commencement Bay. The restoration project is called the Middle Waterway Shore Restoration Project (or the Restoration Project).

2. The Project Planning Group selected the Restoration Project because of the group's expectation that the Restoration Project: (a) would provide valuable riparian and wetland habitat in perpetuity; (b) could demonstrate how to re-establish hummocks and other natural wetland and shrubland features; (c) could be achieved with available funds; (d) does not appear to be exposed to contamination that would jeopardize the Restoration Project's long-term value; (e) and could occur completely on land on which the owner (Simpson) was willing to place a restrictive covenant on the deed to the Restoration Property that would make the land available to the Restoration Project in perpetuity. The restrictive covenant on the deed to the Restoration Property is attached hereto as Exhibit B and incorporated herein (Deed Restriction).

3. The Project Planning Group also recognized that the Restoration Project could provide valuable information for planning future restoration projects in the Commencement Bay environment. Many potential restoration sites within the Commencement Bay environment will be near areas of sediment contamination. Consequently, the Trustees may use this information to evaluate the practicability of conducting restoration activities in close proximity to contaminated areas.

4. Simpson submitted permit applications for the Restoration Project in September 1993 and hereby certifies that it has received all of the necessary federal and state permits for the Restoration Project. For informational purposes, relevant federal, state and local permits for the Restoration Project, and conditions thereto, are attached hereto as Exhibit C.

E. Implementation of the Restoration Project

The Trustees acknowledge that Simpson has successfully completed the planning design, sampling and final project design elements of the Restoration Project and acknowledge Simpson's certification that it has obtained all necessary permits for the Restoration Project (Implementation Phases I through IV herein), and hereby authorize Simpson to proceed with construction and monitoring of the Restoration Project as provided in Sections IV.B.2.(e) and IV.B.2.(f) herein.

F. Purpose of the Agreement

The purpose of this Agreement is to identify the rights and responsibilities of the Parties to cooperatively implement the Restoration Project and maintain it in perpetuity.

III. AUTHORITY

This Agreement is entered into pursuant to the Natural Resource Trustee provisions of § 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. § 9607(f); Section 311 of the Clean Water Act (CWA), as amended, 33 U.S.C. § 1321; the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Subpart G, 40 C.F.R. §§ 300.600 - 300.615, as amended; and other applicable federal, state and tribal law. The following officials or their designees act on behalf of the public as state, federal and tribal Trustees for natural resources under this Agreement:

- The Director of the Department of Ecology for the State of Washington, as lead state Trustee, the Commissioner of Public Lands, and the Director of the Department of Fisheries and Wildlife;
- The Tribal Council, or its designee, for the Puyallup Tribe of Indians;
- The Tribal Council, or its designee, for the Muckleshoot Indian Tribe; or
- The Secretary of the Interior; and the Undersecretary for Oceans and Atmosphere, Administrator of the National Oceanic and Atmospheric Administration, acting on behalf of the Secretary of Commerce.

IV. TERMS AND CONDITIONS

A. Restoration Project Purpose

1. The Restoration Project. The Restoration Project will construct substantial new riparian and wetland habitat and improve existing intertidal habitat for bird and marine life on the Restoration Property. Approximately 3.3 acres of the Restoration Property will be modified to support, compliment, and preserve the integrity of the existing mudflats. Primary actions will be the following: (a) excavating and contouring upland portions of the site to restore a natural shoreline, create intertidal wetlands, and screen the wetland-estuarine habitat from adjacent industrial activity; (b) filling about one-fourth of an acre of existing mudflat to construct a vegetative bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries; (c) removing and/or containing metal debris found on the site; and (d) planting appropriate natural vegetation at the new elevations. Other actions may include incidental cleanup of toxic or other deleterious materials encountered during construction of the Restoration Project. Additional information regarding the Restoration Project is provided in the document entitled "Project Analysis Middle Waterway Shore Restoration Project" (Parametrix, September 1993) and "Project Supplemental Information Summary" (Parametrix, April 1994), the latter of which is attached hereto as Exhibit D and incorporated herein.

2. Restoration Project Purpose. The overall purpose of the Restoration Project is to restore natural resources injured by releases of hazardous substances. The Restoration Project is intended to provide estuarine habitat and to screen this habitat from adjacent developed uplands, thereby increasing the ecosystem complexity and habitat value of Middle Waterway to shore birds, fishes and other aquatic organisms.

B. Restoration Project Administration and Implementation

1. General Roles. This Section describes the Parties' general roles for developing and implementing the Restoration Project. Nothing in this Agreement is intended to create an agency relationship between the Trustees and Simpson.

(a) Project Planning Group. The Project Planning Group shall work with each other and interested agencies in planning the Restoration Project, including, but not limited to, developing a project analysis, an excavation and grading plan, a planting plan, a pre-construction monitoring plan, and an adaptive management and monitoring plan. The Project Planning Group also shall work together in developing work schedules and

applications for necessary federal and state permits, in preparing for public meetings and hearings related to the Restoration Project, and in reviewing monitoring results. Although it is the intent of the Project Planning Group to make decisions regarding the Restoration Project by consensus, the Trustees retain the right to make all final decisions with regard to the Restoration Project (other than those addressed by this Agreement).

(b) Simpson. Simpson shall be responsible for developing and implementing the Restoration Project in accordance with Section IV.B.2 below. Simpson shall be obligated to proceed with each of the six phases of the Restoration Project identified in Section IV.B.2 below upon Simpson's receipt of written authorization to proceed from the Trustees, which has been provided under Section II.E above. Simpson may retain consultants, contractors or other services, as are agreed to by the parties, to assist Simpson in developing and implementing the Restoration Project.

(c) The Trustees. The Trustees shall be responsible for overseeing the development and implementation of the Restoration Project. Specifically, the Trustees shall review and concur in all work plans and deliverable documents, shall review and approve all requests for reimbursement of Restoration Project expenses, and shall notify Simpson when to proceed with each phase of Restoration Project development and implementation. The Trustees have provided their authorization to proceed with all phases of the Restoration Project in Section II.E above.

2. Implementation Phases. Implementation of the Restoration Project shall be broken down into the following six phases described in this Section (several of which may overlap). A summary of Restoration Project deliverables may be found in Exhibit E attached hereto and incorporated herein.

(a) Planning design. Simpson (or its consultant or contractor) shall be responsible for preparing the project analysis (Project deliverable 1). The Parties shall use the project analysis as the basis for deciding whether to proceed with Restoration Project permitting. The Trustees acknowledge that Simpson has completed this phase of the Restoration Project.

(b) Permitting. Simpson shall be responsible for applying for and receiving all necessary permits, including the City of Tacoma Shoreline Substantial Development Permit (Shoreline Permit), the U.S. Corps of Engineers Section 10/404 permit (Corps Permit), and the City of Tacoma Excavating and Grading permit (Project deliverables 2 through 4, respectively). To the extent consistent with the Trustees' discharge of their duties under

CERCLA and other applicable laws, the Trustees shall cooperate with Simpson on all permit applications related to the Restoration Project. The Trustees acknowledge Simpson's certification that it has completed this phase of the Restoration Project.

(c) Sampling. Simpson (or its consultant or contractor) shall be responsible for preparing, in cooperation with the Project Planning Group, plans for pre-construction sampling (Project deliverable 5). Simpson (or its consultant or contractor) shall implement pre-construction sampling once the sampling plan is approved by the Project Planning Group and relevant resource agencies. Simpson shall deliver a report summarizing the results of the pre-construction sampling to the Trustees upon completion of the sampling (Project deliverable 6). The Trustees shall use the results of the permit process and pre-construction sampling in deciding whether to proceed with Restoration Project construction. The Trustees acknowledge that Simpson has completed this phase of the Restoration Project.

(d) Final project design. Simpson (or its consultant or contractor) shall be responsible for preparing, in cooperation with the Project Planning Group, final design plans for the Restoration Project, including plans for excavation and grading, planting, removal or containment of the brass foundry debris found on the Restoration Property, and post-construction monitoring and adaptive management (Project deliverables 7 through 10, respectively). The Trustees shall review and concur in final project design plans before Restoration Project construction. The Trustees acknowledge that Simpson has completed this phase of the Restoration Project.

(e) Construction. Simpson (or its consultant or contractor) shall be responsible for constructing the Restoration Project in accordance with the final design plans reviewed and concurred with by the Trustees and for conducting construction monitoring. Simpson shall proceed with Restoration Project construction only after Simpson has certified that it has obtained all necessary permits for the Restoration Project, and the Trustees have notified Simpson in writing to proceed, both of which have been provided under Sections II.D.4 and II.E, respectively. Simpson shall record the Deed Restriction within thirty (30) days of initiation of construction of the Restoration Project. Simpson shall provide as-built drawings to the Trustees upon the completion of Restoration Project construction (Project deliverable 11).

(f) Post-construction monitoring. Simpson (or its consultant or contractor) shall be responsible for implementing plans for post-construction monitoring and submitting monitoring

results to the Trustees as required under the Adaptive Management and Monitoring Plan (Project deliverable 12). The Trustees are under no obligation to continue post-construction monitoring of the Restoration Project.

C. Property Ownership, Use, Maintenance and Adaptive Management

This Section describes ownership, use, maintenance and adaptive management of the Restoration Property. Nothing in this Agreement is intended to make the Trustees the owners or operators of the Restoration Property.

1. Restoration Property Ownership. Simpson shall retain all ownership of the Restoration Property subject to the Deed Restriction. It is the purpose of this Deed Restriction to assure that the Restoration Property will provide habitat value in the Commencement Bay environment in perpetuity.

2. Restoration Property Use.

(a) Use of Restoration Property. Simpson shall not use or conduct activities on the Restoration Property except those necessary to implement this Agreement and those that are consistent with the purpose provided in Section IV.A above. Use of, or activity on, the Restoration Property inconsistent with this purpose is prohibited, and Simpson acknowledges and agrees that it will not conduct, engage in, or permit such use or activity.

(b) Use of Adjoining Properties Owned by Simpson. This Agreement is not intended to prevent or prohibit any use of, or activity on, properties owned by Simpson adjoining the Restoration Property, provided that any use or activity having the effect of causing a trespass on the Restoration Property is prohibited unless approved by the Trustees in accordance with Sections IV.B.2.(c) and (d) below. The Trustees specifically acknowledge that Simpson may continue to operate its properties adjacent to the Restoration Property as industrial facilities, and may make use of the existing railroad right-of-way adjacent to the Restoration Property for the transport of materials into and out of its facilities. The Trustees also acknowledge that Simpson desires to construct upland stormwater pollution prevention and treatment facilities on Simpson property adjoining the Restoration Property, but reserve their rights under this Agreement and their authority under applicable law to evaluate such a proposal at the time it is proposed.

(c) Notice. Simpson shall first notify the Trustees and receive their approval before undertaking any action on the Restoration Property that may be inconsistent with the purpose of

the Restoration Project provided in Section IV.A above or on adjacent properties that may have the effect of causing a trespass on the Restoration Property, except where Simpson must undertake emergency action to protect health, safety or the environment on the Restoration Property. Whenever notice is required, Simpson shall notify the Trustees in writing not less than sixty (60) days prior to the date Simpson intends to undertake the use or activity in question. The notice shall describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit the Trustees to make an informed judgment as to its consistency with the purpose of the Restoration Project. Simpson shall also notify the Trustees of any communications it receives from Union Pacific regarding vegetation management of the railroad right-of-way adjacent to the Restoration Property within four (4) working days of Simpson's receipt of such communication.

(d) Approval. Whenever notice and the Trustees' approval are required, the Trustees shall grant, condition or withhold their approval in writing within thirty (30) days of receipt of Simpson's written request for approval. The Trustees' approval may be withheld only upon a reasonable determination by the Trustees that the action as proposed would be inconsistent with the purpose of the Restoration Project and would significantly impair or interfere with the habitat value of the Restoration Project. The Trustees' approval may include reasonable conditions which must be satisfied in undertaking the proposed use or activity. If the Trustees do not grant or withhold their approval in the time period and manner set forth herein, Simpson may assume the Trustees' approval of the permitted use or activity in question.

3. Restoration Property Maintenance and Adaptive Management.

(a) In consultation with the Trustees, Simpson (or its consultants or contractors) shall be responsible for the upkeep and maintenance of the Restoration Property in the same manner as any other landowner would be responsible for such matters, and for any monitoring that may be required under the Monitoring and Adaptive Management Plan for the Restoration Project. Upkeep and maintenance of the Restoration Property shall include, at a minimum, keeping the Restoration Property free of unsightly debris, the railroad right-of-way adjacent to the Restoration Property free of woody vegetation, and a "No Spraying" sign placed along the railroad right-of-way. The Trustees are under no obligation to continue upkeep, maintenance, and monitoring of the Restoration Project.

(b) The Trustees shall consult with Simpson as to the need for adaptive management activities on the Restoration Property, and how such adaptive management activities will be funded and implemented on the Restoration Property. For purposes of this Agreement, "adaptive management activities" shall be additional actions undertaken on the Restoration Property to maintain the constructed habitat or change the habitat in some manner to meet the Restoration Project purpose provided in Section IV.A.2 above. Anticipated changes or developments that may require adaptive management include, among others, the failure of the vegetation to establish or spread and substantial erosion or sedimentation that adversely alters habitat characteristics. Simpson shall not be financially responsible for adaptive management activities on the Restoration Property.

4. Coordination and Consultation. Subject to their mutual agreement, Simpson and the Trustees shall continue their on-going relationship of working together on restoration planning and plan implementation in the Commencement Bay environment (Bay-wide Restoration Activities), including, if requested by Simpson, Simpson's participation in non-confidential Trustee-sponsored groups that involve potentially responsible parties and the public in Bay-wide Restoration Activities. Simpson and the Trustees shall meet at least annually to discuss matters related to the following: (i) Restoration Project monitoring; (ii) Restoration Property upkeep and maintenance and the need for adaptive management on the Restoration Property; (iii) use of adjoining properties owned by Simpson; and (iv) general non-confidential Bay-wide Restoration Activities. If mutually convenient, this meeting shall be arranged to coincide with the receipt of any monitoring results from the previous year. At each such annual meeting, Simpson shall provide the Trustees with information regarding the level of effort and cost incurred by Simpson in fulfilling its Restoration Property upkeep and maintenance and monitoring obligations under Section IV.C.3.(a). Simpson or the Trustees may also request and arrange a meeting with each other at any time to consult on matters related to the Restoration Project, the Restoration Property, use of adjoining properties owned by Simpson, or general non-confidential Bay-wide Restoration Activities. Simpson shall consider, but is not obligated to follow voluntarily, any recommendations provided by the Trustees concerning the use of adjoining properties owned by Simpson; provided, however, that nothing in this Section shall affect Simpson's obligations under Section IV.C.2.(b) and (d), the Trustees' rights under Section IV.F, nor any other legal rights or remedies available to the Parties under applicable law. The Trustees shall consider, but are not obligated to follow voluntarily, any recommendations provided by Simpson concerning general Bay-wide Restoration Activities.

D. Restoration Property and Project Expenses

1. Restoration Property Expenses. Except as provided in Section IV.D.3 below, Simpson shall provide the Restoration Property for the Restoration Project, and assume all responsibility for the payment of expenses related to the ownership and operation of the Restoration Property, including the maintenance of adequate comprehensive general liability insurance coverage and the payment of all taxes, assessments, fees, charges of whatever description levied on or assessed against the Restoration Property by competent authority.

2. Restoration Project Expenses. Except as provided in Section IV.D.3 below, Simpson shall bear the costs incident to planning, permitting, sampling, final project design, construction and planting in accordance with the final plans and specifications for the Restoration Project, and post-construction monitoring in accordance with the Monitoring and Adaptive Management Plan for the Restoration Project, including any obligation that arises as a consequence of permit conditions associated with the Restoration Project. As provided in Section IV.C.3.(b) above, Simpson shall not be financially responsible for adaptive management activities on the Restoration Property.

3. Trustee Compensation and Reimbursement. The Trustees shall compensate Simpson for the Restoration Property and reimburse Simpson for Restoration Project related expenses from moneys deposited in the Fund as provided in "Schedule 1" attached hereto and incorporated herein by this reference. Schedule 1 shall become null and void upon entry by the court of a Commencement Bay-wide Natural Resource Damage settlement agreement involving Simpson and the Trustees and incorporating alternative terms and conditions for such compensation and reimbursement, provided that such settlement agreement is entered by the court on or before June 30, 1996.

E. Access

1. Simpson Access. Simpson (or its consultant or contractor) may enter and freely move about the Restoration Property for purposes of inspecting conditions, activities, and the results of activities; carrying out Restoration Project- or Property-related activities under this Agreement; and undertaking emergency action to protect health, safety or the environment on the Restoration Property. Otherwise, Simpson shall notify the Trustees in advance before entering the Restoration Property.

2. Trustee Access. At all reasonable times and upon prior notice to Simpson, the Trustees (or other parties specifically designated by the Trustees) may enter and freely move about the

Restoration Property for the purposes of inspecting conditions, activities, and the results of activities; reviewing the progress of Simpson in implementing the Restoration Project or carrying out the terms of this Agreement; conducting tests and taking samples of soil, water, air and biota as the Trustees deem necessary; using a camera, sound recording device or other documentary type equipment; placing monitoring devices; and verifying the data submitted to the Trustees by Simpson.

3. Public Access. Access by the general public to any part of the Restoration Property shall be made through Simpson, but only after consent by the Trustees (which may be given orally or in writing).

F. Enforcement of Agreement Terms and Conditions

1. Notice of Dispute. If a dispute arises between the Parties concerning any provision of this Agreement, including the violation or threatened violation of any provision of this Agreement, the notifying party shall give written notice to the other party (the notified party) of such dispute. In the case of a violation or threatened violation, the notification shall identify corrective action sufficient to cure the violation and, where the violation involves injury to the Restoration Property resulting from use or activity inconsistent with the purpose of this Restoration Project, to restore the portion of the Restoration Property so injured.

2. Dispute Resolution.

(a) Informal Negotiations. The Parties shall attempt to resolve expeditiously and informally any dispute concerning this Agreement and its implementation. Informal negotiations between the Parties may last for a period of up to fourteen (14) calendar days from the date that written notice of the existence of the dispute is served on the notified party, unless it is extended by written agreement between the Parties.

(b) Preparation of Joint Statement of Position. In the event that any dispute arising under this Agreement is not resolved informally within the fourteen (14) day time period indicated above, the Parties shall jointly prepare a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis or opinion supporting each position, and all supporting documentation on which each party relies (hereinafter the "Joint Statement of Position"). The Parties shall complete the Joint Statement of Position within fourteen (14) days after the conclusion of informal negotiations, unless it is extended by written agreement between the Parties.

(c) Referral of Dispute to District Court. In the event that the Parties still cannot resolve the dispute within the fourteen (14) day time period indicated above for completion of the Joint Statement of Position, the Parties shall promptly lodge the Joint Statement of Position with the U.S. District Court for the Western District of Washington for a decision. The U.S. District Court for the Western District has continuing jurisdiction over the Consent Decree.

(d) Failure to Respond. The notifying party may bring an action under the U.S. District Court for the Western District of Washington's continuing jurisdiction over the Consent Decree to enforce the terms of this Agreement if the notified party:

(1) Fails to meet with the notifying party to resolve the dispute within the fourteen (14) day period identified above for informal negotiations or to cure the violation within such period;

(2) Fails to work with the notifying party to complete a Joint Statement of Position within the fourteen (14) day period identified above for such completion or to cure the violation within such period;

(3) Fails to commence substantial activities to cure a violation within thirty (30) days after agreeing to cure such violation; or

(4) Fails to continue diligently to cure such violation until finally cured.

3. Remedies. The Parties agree that the remedies at law for violation of the terms of this Agreement are inadequate and that the prevailing party shall be entitled to injunctive relief, in addition to such other relief to which the prevailing party may be entitled, including specific performance of the terms of this Agreement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. For instance, where the violation involves injury to the Restoration Property resulting from an unapproved trespass or any use or activity on the Restoration Property inconsistent with the purpose provided in Section IV.A above, the prevailing party may require the party responsible for the violation to restore the portion of the Restoration Property so injured.

4. Enforcement Discretion. Enforcement of the terms of this Agreement shall be at the discretion of the Parties, and any forbearance by either of the parties to exercise its rights under this Agreement in the event of any breach of any term of this

Agreement by the other party shall not be deemed or construed to be a waiver by the party of such term or any of the party's rights under this Agreement. No delay or omission by either party in the exercise of any right or remedy upon any breach by the other party shall impair such right or remedy or be construed as a waiver.

G. Subsequent Transfers or Removal of the Deed Restriction and Termination of the Agreement

1. Subsequent Transfers.

(a) Simpson agrees to incorporate the terms of the Deed Restriction in any deed or other legal instrument by which Simpson holds title to the Restoration Property and in any deed or legal instrument by which Simpson conveys any interest in all or a portion of the Restoration Property, including without limitation, a leasehold interest.

(b) Simpson further agrees to give written notice to the Trustees of the transfer of any interest in all or a portion of the Restoration Property at least sixty (60) days prior to the date of such transfer. Such notice shall include the names and address of the proposed transferee, its corporate relationship, if any, to Simpson, and the nature of the proposed transferee's business. If the Trustees conclude that the proposed transferee is not a suitable entity for taking on the maintenance and monitoring obligations under this Agreement, the Trustees shall request in writing, within thirty (30) days after receiving the information under this paragraph (or forfeit their opportunity to make such request), that such maintenance and monitoring obligations be transferred to the Trustees or other suitable entity acceptable to the Trustees, together with a mutually agreeable right of entry and such moneys as are reasonably necessary, based on Simpson's records of actual annual maintenance and monitoring expenditures, to carry out over a ten year period any remaining maintenance and monitoring obligations under this Agreement. Simpson's consent to any such request shall not be unreasonably withheld.

(c) The failure of Simpson to perform any act required by this paragraph shall not impair the validity of the Deed Restriction or this Agreement or limit its enforceability in any way.

2. Removal of the Deed Restriction and Termination of the Agreement. If circumstances arise in the future that render the purpose of the Restoration Project impossible or impractical to accomplish, the Parties may agree to remove the Deed Restriction from the Restoration Property and terminate this Agreement. If

the Parties agree to remove the Deed Restriction from the Restoration Property and terminate this Agreement, Simpson shall pay the Trustees an amount in cash equal to the following:

(a) The value of the Restoration Property at the time of removal of the Deed Restriction, based on highest and best use of the Restoration Property at the time of removal of the Deed Restriction and not limited to its value as habitat, as determined by a qualified appraisal conducted by or for, and at the expense of, the Trustees; and

(b) Such moneys as are reasonably necessary, based on Simpson's records of actual annual maintenance and monitoring expenditures, to carry out over a ten year period any remaining maintenance and monitoring obligations under this Agreement.

The Deed Restriction shall be removed and this Agreement terminated upon payment to the Trustees of such moneys as determined under subparagraphs (a) and (b) above.

H. Indemnification and Hold Harmless Provisions

It is the intent of Simpson and the Trustees that nothing about this Agreement or the construction or operation of the Restoration Project shall result in the creation of liability for the Trustees as a consequence of any hazardous substances, including all known or subsequently discovered hazardous substances, that remain on, in, under or about the Restoration Property as of the effective date of this Agreement ("Historic Contamination"). Simpson shall continue to remain liable for the cleanup and/or remediation of any Historic Contamination, and for all monitoring, testing or other ongoing or future requirements regarding Historic Contamination on, in, under or about the Restoration Property that either have been, or may in the future be, imposed by the EPA, Ecology or by other lawful means. Simpson shall hold the Trustees harmless and shall indemnify and defend the Trustees against any claim that may be asserted by any person against the Trustees due to the presence of hazardous substances on, in, under or about the Restoration Property. If by operation of law any property interest is transferred to the Trustees pursuant to this Agreement, such transfer shall not create liability for future cleanup, remediation and/or natural resource damages due to the presence of Historic Contamination that remains on, in, under or about the Restoration Property as of the date that such interest is transferred.

V. COMMUNICATIONS

Written Communications among the parties to this Agreement shall be addressed to their representatives identified below, or

to such other representative or representatives as shall subsequently be designated in a written notice to the other party.

TRUSTEES

Robert C. Clark, Jr.
NOAA Restoration Center/Northwest
Northwest Regional Office F/NWO
National Marine Fisheries Service - NOAA
7600 Sand Point Way N.E.
Seattle, WA 98115-0070

Robert A. Taylor
National Oceanic and Atmospheric Administration
Damage Assessment and Restoration Center
7600 Sand Point Way N.W.
Seattle, WA 98115-0070

SIMPSON TACOMA KRAFT COMPANY

Dave McEntee
Environmental Manager
Simpson Tacoma Kraft Company
P.O. Box 2133
Portland Avenue
Tacoma, Washington 98401

Edward J. Reeve
Senior Counsel
Simpson Tacoma Kraft Company
1201 Third Avenue, Suite 4900
Seattle, Washington 98101-3009

Kenneth S. Weiner/Konrad J. Liegel
Preston Gates & Ellis
5000 Columbia Center
701 5th Avenue
Seattle, Washington 98104-7011

VI. GENERAL PROVISIONS

A. Liberal Construction

Notwithstanding any general rule of construction, this Agreement shall be liberally construed to effect the purpose of the Restoration Project. If any provision is found to be ambiguous, an interpretation consistent with the purpose of the Restoration Project that would render the provision valid shall

be favored over any other interpretation that would render it invalid.

B. **Severability**

The clauses of this Agreement are severable, and should any part of this Agreement be declared by a court of competent jurisdiction to be invalid, the other parts of this Agreement shall remain in full force and effect.

C. **Entire Agreement**

This Agreement constitutes the entire understanding of the Parties with respect to its subject matter.

D. **Modifications**

All modifications of this Agreement shall be in writing and executed by all the Parties.

E. **Termination of Rights and Obligations**

A party's rights and obligations under this Agreement shall terminate upon transfer of the party's interest in the Restoration Property, except for the following rights and obligations which shall survive transfer: (1) Simpson's obligations concerning use of adjoining properties owned by Simpson and indemnification of the Trustees for environmental matters concerning Historic Contamination, as provided in Sections IV.C.2 and IV.H, respectively, and rights concerning consultation on Bay-wide Restoration Activities, as provided in Section IV.C.4, and (2) Simpson's liability for acts or omissions occurring prior to transfer.

F. **Member of or Delegate to Congress**

In accordance with 41 U.S.C. § 22, no Member of or Delegate to Congress shall be admitted to any share or part of this Agreement, or to any benefit that may arise from this Agreement.

G. **Counterparts**

This Agreement can be executed in one or more counterparts, all of which will be considered the original document.

H. **Effectiveness Date**

This Agreement is effective as of the date first provided in Section I of the Agreement.

VII. PARTIES BOUND

The provisions of this Agreement shall apply to and be binding upon the Parties to this Agreement, their agents, successors and assigns. The undersigned representative of each party certifies that he or she is fully authorized by the party or parties whom he or she represents to enter into this Agreement and to bind that party to it.

IN WITNESS WHEREOF, the Parties have signed this Agreement on the day and year appearing opposite their signature.

TRUSTEES

By the signature of its authorized representative below, the State of Washington approves and enters into this Cooperative Agreement.

State of Washington	Dated

By the signature of its authorized representative below, the Puyallup Tribe of Indians approves and enters into this Cooperative Agreement.

William C Sullivan
Puyallup Tribe of Indians

5/25/95
Dated

By the signature of its authorized representative below, the Muckleshoot Indian Tribe approves and enters into this Cooperative Agreement.

Muckleshoot Indian Tribe

5-31-95
Dated

By the signature of its authorized representative below, the National Oceanic and Atmospheric Administration approves and enters into this Cooperative Agreement.

C N Ehler. 5/25/95.

National Oceanic and Atmospheric Administration
Charles N. Ehler
Director, Office of Ocean Resources Conservation and Assessment
National Ocean Service

Dated

By the signature of its authorized representative below, the Department of the Interior approves and enters into this Cooperative Agreement.

Charles S. Pitts

Department of the Interior

5/30/95

Dated

SIMPSON

By the signature of its authorized representative below, Simpson approves and enters into this Cooperative Agreement.

R.P. Dunmain ________________ 5/31/95
Dated

EXHIBITS

A. Legal Description of the Restoration Property

B. Deed Restriction on the Restoration Property

C. Relevant Restoration Project Permits

D. Restoration Project Supplemental Information Summary - Middle Waterway Shore Restoration Project (Parametrix, April 1994)

E. Restoration Project Deliverables

SCHEDULE

1. Terms and Conditions Regarding Compensation for the Value of the Restoration Property and Reimbursement of Restoration Project Expenses

EXHIBIT A

Legal Description of the Restoration Property

DESCRIPTION OF RESTORATION SITE ALONG MIDDLE WATERWAY

Parcel A

A parcel of land situate in the Northeast Quarter (NE1/4) of Section 4, Township 20 North, Range 3 East and in the South Half (S1/2) of Section 33, Township 21 North, Range 3 East of the Willamette Meridian, Pierce County, Tacoma, Washington, said parcel being a portion of Parcel 2 as conveyed by Union Pacific Railroad Company to Union Pacific Land Resources Corporation by Deed dated April 1, 1971, and recorded January 27, 1977, as Instrument No. 2714454, Records of said County, said parcel bounded and described as follows:

Commencing at the intersection of the centerlines of East Eleventh Street (formerly South Eleventh Street) and St. Paul Avenue;

thence North 49°41'30" East, along the centerline of said East Eleventh Street, 599.09 feet;

thence North 27°31'30" West, 51.27 feet, more or less, to the TRUE POINT OF BEGINNING, said point also being on the northwesterly line of said East Eleventh Street;

thence continuing North 27°31'30" West, 30.76 feet;

thence South 49°41'30" West, 215.37 feet, more or less, to a point on the easterly line of an unnamed Street;

thence along the easterly line of said unnamed Street, North 22°24'32" West, 105.09 feet to a point on the southeasterly line of Middle Waterway;

thence along said southeasterly line, North 49°41'30" East, 63.06 feet, more or less, to the most easterly corner of Middle Waterway;

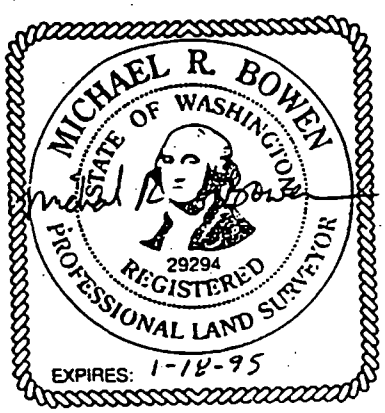
thence along the northeasterly line of Middle Waterway, North 22°24'32" West, 960.98 feet;

thence leaving said northeasterly line North 67°33'30" East, 194.00 feet;

thence South 28°49'52" East, 53.73 feet;

thence South 22°26'30" East 979.51 feet to a point on the northwesterly line of said East Eleventh Street;

thence along said northwesterly line, South 49°41'30" West, 55.63 feet, more or less, to the TRUE POINT OF BEGINNING.



55-1650-30

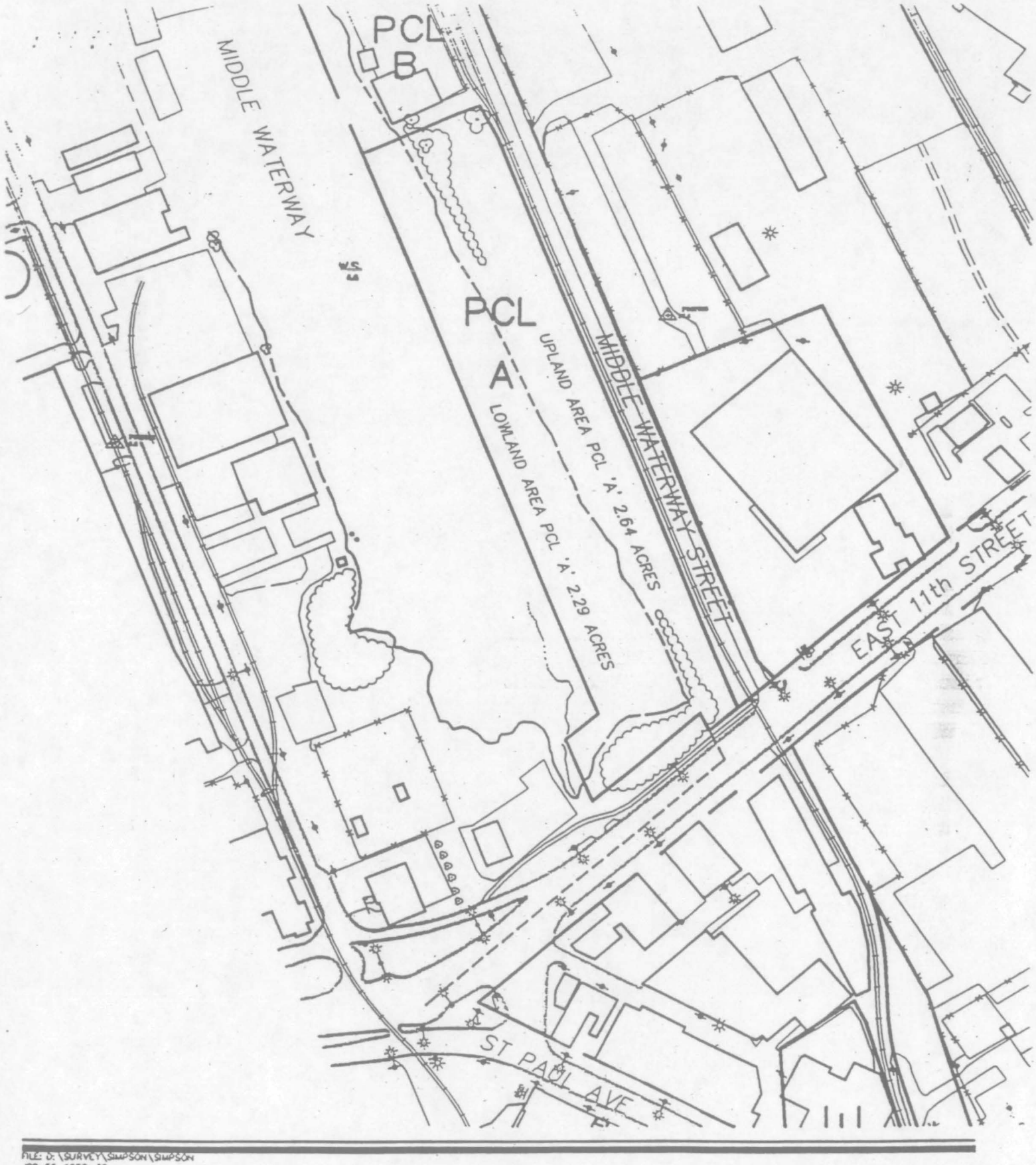


Figure 1
MIDDLE WATERWAY
RESTORATION PROJECT
SIMPSON TACOMA KRAFT

SCALE IN FEET
0 200 400

N

EXHIBIT B

AFTER RECORDING, RETURN TO:

PRESTON GATES & ELLIS
5000 Columbia Center
701 Fifth Avenue
Seattle, WA 98104-7078

Attn: Konrad Liegel

C.T.I.
6947126-1C
JUN 30 1995

95 JUN 30 AM 11:55

RECORDED
CATHY PEARSALL-STIPEK
AUDITOR PIERCE CO. WASH

Restrictive Covenant

Notice is hereby given that the property legally described in exhibit A hereto (the Restoration Property) is subject to use restrictions and other obligations enforceable by the Natural Resource Trustees for Commencement Bay (enumerated in the Cooperative Agreement described below). The purpose of these restrictions and obligations is to ensure that the Restoration Property provides habitat value in perpetuity in the Commencement Bay environment.

These restrictions and obligations are described in Section IV of the Cooperative Agreement for the Middle Waterway Shore Restoration Project (Cooperative Agreement). Copies of the Cooperative Agreement are available from the United States District Court for the Western District of Washington, which has jurisdiction over the Consent Decree entitled "Commencement Bay Nearshore/Tideflats Superfund Site; St. Paul Waterway Problem Area Consent Decree," Civil No. C91-5260TC, filed with the court.

Potential purchasers and lessees are further put on notice that, pursuant to the Cooperative Agreement, the Restoration Property may not be disturbed in any manner that would impair or interfere with the integrity of the habitat restoration, unless the Natural Resource Trustees for Commencement Bay, or their successors in interest, determine that such disturbance is necessary to (i) maintain habitat value in perpetuity or (ii) reduce a threat to human health or the environment.

The restrictions and obligations described above are intended to run with the land and are intended to be binding on any and all persons who acquire an interest in the Restoration Property. This restrictive covenant may be removed from the Restoration Property if circumstances arise in the future that render the purpose of the restrictions and obligations impossible or impractical to accomplish, but only in the manner provided for in the Cooperative Agreement.

DATED this 16th day of June, 1995

SIMPSON TACOMA LAND COMPANY, Restoration Property Owner

By: R.P. Tennyson

Its: PRESIDENT

SIMPSON TACOMA LAND CO. CORPORATE SEAL 1987 WASHINGTON

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 16th day of June, 1995 before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared R.P. Tennyson, to me known to be the President, of the SIMPSON TACOMA LAND COMPANY, the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute the said instrument and that the seal affixed (if any) is the corporate seal of said corporation.

WITNESS my hand and official seal affixed the day and year in this certificate above written.

BONNIE L. HACKNEY NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 6-1-99

NOTARY PUBLIC in and for the State of Washington, residing at Seattle
My commission expires 6/1/99

DESCRIPTION OF RESTORATION SITE ALONG MIDDLE WATERWAY

Parcel A

A parcel of land situate in the Northeast Quarter (NE1/4) of Section 4, Township 20 North, Range 3 East and in the South Half (S1/2) of Section 33, Township 21 North, Range 3 East of the Willamette Meridian, Pierce County, Tacoma, Washington, said parcel being a portion of Parcel 2 as conveyed by Union Pacific Railroad Company to Union Pacific Land Resources Corporation by Deed dated April 1, 1971, and recorded January 27, 1977, as Instrument No. 2714454, Records of said County, said parcel bounded and described as follows:

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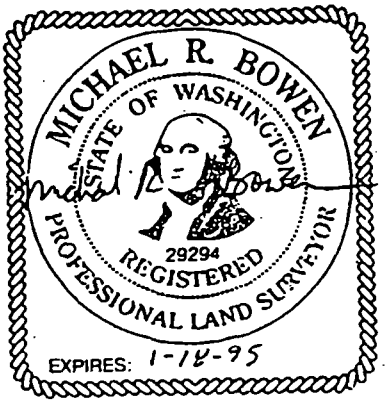
thence along the northeasterly line of Middle Waterway, North 22°24'32" West, 960.98 feet;

thence leaving said northeasterly line North 67°33'30" East, 194.00 feet;

thence South 28°49'52" East, 53.73 feet;

thence South 22°26'30" East 979.51 feet to a point on the northwesterly line of said East Eleventh Street;

thence along said northwesterly line, South 49°41'30" West, 55.63 feet, more or less, to the TRUE POINT OF BEGINNING.



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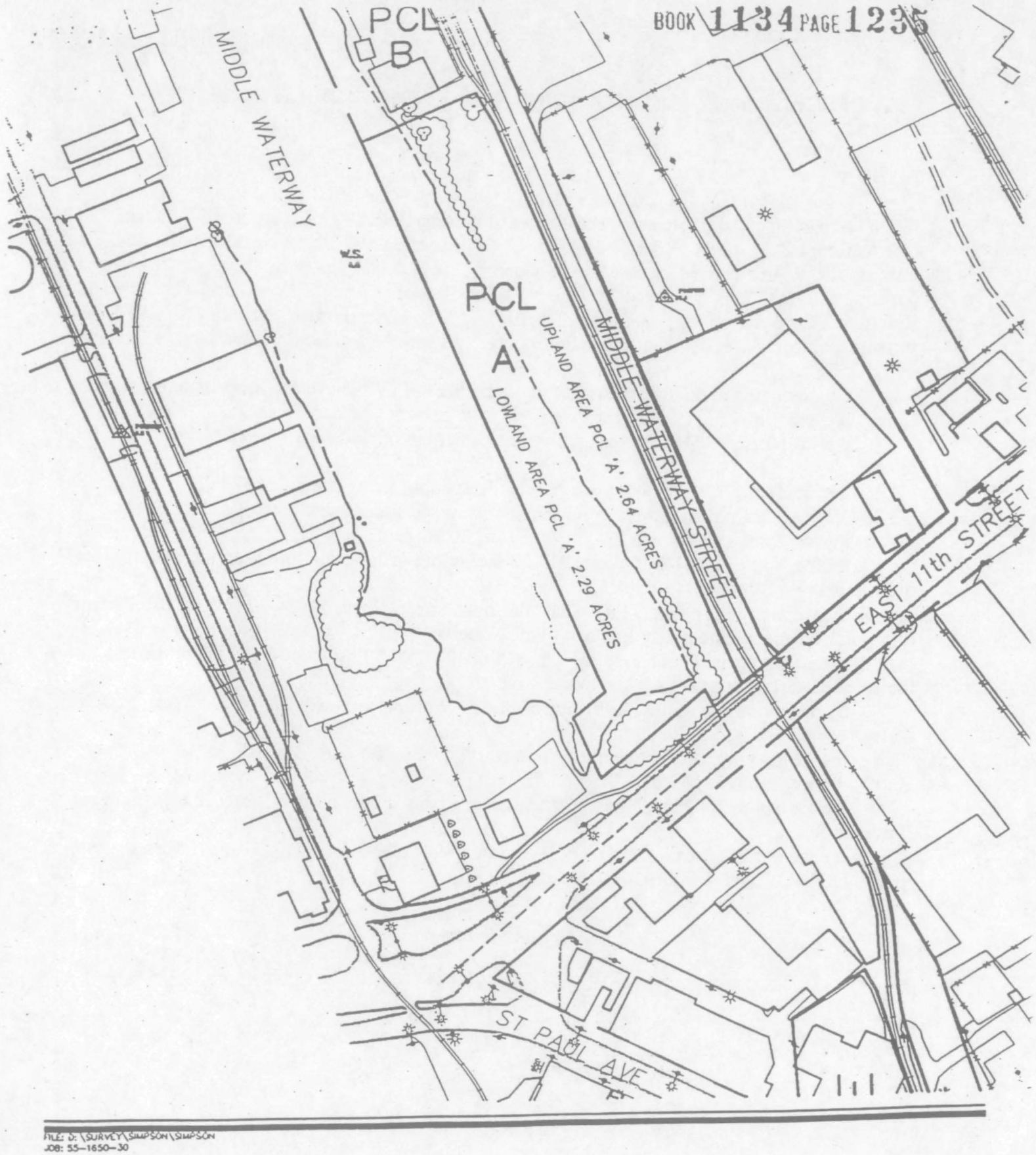

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JOB: 55-1650-30

Figure 1
MIDDLE WATERWAY
RESTORATION PROJECT
SIMPSON TACOMA KRAFT

SCALE IN FEET
0 200 400

N

EXHIBIT C

RELEVANT RESTORATION PROJECT PERMITS

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

JAN 2 5

January 20, 1994

Mr. Dave McEntee
Simpson Tacoma Kraft Company
Post Office Box 2133
Tacoma, WA 98401

Dear Mr. McEntee:

Re: City of Tacoma Permit #141.559
Simpson Tacoma Kraft Company - Applicant
Shoreline Substantial Development Permit #1994-15295

The subject Shoreline Management Substantial Development permit has been filed with this office by the City of Tacoma on January 6, 1994.

If this permit is not appealed to the Shorelines Hearings Board on or before February 7, 1994, authorized construction may begin. Other federal, state, and local laws regulating such construction shall be complied with. Unless an appeal is filed, this letter constitutes final notification of action on this permit.

Sincerely,

K-Y Su
Permit Coordinator
Shorelands and Coastal Zone
Management Program

KYS:pz
RECSDP.WP

cc: Kathlyn C. Henderson, City of Tacoma

Tacoma City of Tacoma
Hearing Examiner

RECEIVED
JAN 5 1994
KONRAD J. LIEGEL

January 5, 1994

Conrad Ligal, Attorney at Law
Preston, Thorgrimson, Shidler,
Gates & Ellis
5000 Columbia Center
701 Fifth Avenue
Seattle, Washington 98104-7078

RE: Shoreline Management Substantial Development Permit
Applicant: Simpson Tacoma Kraft Company
File No.: 141.559
Location: Southeastern Shore of Middle Waterway adjacent to East 11th Street and Middle Waterway Road

The above-application for a Shoreline Management Substantial Development Permit was considered by the Tacoma City Council on January 4, 1994.

The Tacoma City Council acted to concur with the recommendation of the Hearing Examiner, approving the permit by a vote of 9 - 0 (The Mayor and all Council Members were present).

Development pursuant to this permit will not begin or is not authorized until thirty (30) days from the date of filing as defined in RCW 90.58.140(6) and WAC 173-14-090, or until all review proceedings initiated within thirty (30) days from the date of such filing have terminated: EXCEPT as provided in RCW 90.58.140(5)(a)(b)(c).

RODNEY M. KERSLAKE
Hearing Examiner

/mt
Attachment

cc: Department of Ecology
Attorney General
Public Works Department (BLUS)
Army Corps of Engineers

SHORELINE MANAGEMENT ACT OF 1971 PERMIT FOR SHORELINE
MANAGEMENT SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE OR VARIANCE

Application No. 141.559
Administering Agency City of Tacoma
Date Received September 21, 1993
Approved XX Denied _____
Dated January 4, 1994

Type of Action(s) (Check appropriate one)

- Substantial Development Permit _____X
- Conditional Use Permit _____
- Variance Permit _____

Pursuant to Chapter 90.58 RCW, a permit is hereby granted/denied to:

Simpson Tacoma Kraft Company, P.O. Box 2133, Tacoma, WA 98401 to undertake the following development:

See the attached Hearing Examiner Report and Recommendation to the City Council. upon the following property: See the attached Hearing Examiner Report and Recommendation to the City Council.within Middle Waterwayin the "S-10" Port Industrial Shoreline District.

The project will be within shorelines of state-wide significance (RCW 90.58.030).

The project will be located within a(n) urban designation. The following master program provisions are applicable to this development (state the master program section or page number): If a conditional use or variance, also identify the portion of the master program which provides that the proposed use may be a conditional use, or that portion of the master program being varied.

See the attached Hearing Examiner Report and Recommendation to the City Council.

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

See the attached Hearing Examiner Report and Recommendation to the City Council.

This permit is granted pursuant to the Shoreline Management Act of 1971 and nothing in this permit shall excuse the applicant from compliance with any other federal, state or local statutes, ordinances or regulations applicable to this project, but not inconsistent with the Shoreline Management Act (Chapter 90.58 RCW). This permit may be rescinded pursuant to RCW 90.58.140(8) in the event the permittee fails to comply with the terms or conditions hereof.

CONSTRUCTION PURSUANT TO THIS PERMIT WILL NOT BEGIN OR IS NOT AUTHORIZED UNTIL THIRTY (30) DAYS FROM THE DATE OF FILING AS DEFINED IN RCW 90.58.140(6) AND WAC 173-14-090, OR UNTIL ALL REVIEW PROCEEDINGS INITIATED WITHIN THIRTY (30) DAYS FROM THE DATE OF SUCH FILING HAVE TERMINATED: EXCEPT AS PROVIDED IN RCW 90.58.140(5)(a)(b)(c).

1-4-94 _____
(Date) (Signature of Authorized Local Government Official)

THIS SECTION FOR DEPARTMENT USE ONLY IN REGARD TO A CONDITIONAL USE OR VARIANCE PERMIT.

Date received by the Department _____
Approved _____ Denied _____

City of Tacoma
Hearing Examiner

RECEIVED
DEC 2 7 1993
KONRAD J. LIEGEL

December 20, 1993

Conrad Ligal, Attorney at Law
Preston, Thorgrimson, Shidler,
Gates & Ellis
5000 Columbia Center
701 Fifth Avenue
Seattle, Washington 98104-7078

RE: Applicant: Simpson Tacoma Kraft Company
File No.: 141.559
Location: Southeastern Shore of Middle Waterway adjacent to East 11th Street and Middle Waterway Road

The referred-to Shoreline Management Substantial Development Permit has been recommended for approval, subject to conditions. The findings and conclusions of the undersigned Hearing Examiner are attached.

All development must be strictly in accordance with the permit to be issued after final Council action.

This action has been taken pursuant to the Shoreline Management Act, Chapter 90.58 RCW, and Chapter 13.10 of the Official Code of the City of Tacoma.

Wick Dufford/mt

WICK DUFFORD
Hearing Examiner Pro Tempore

/mt
Attachment

cc: Mayor and Members of the City Council
Department of Ecology
Attorney General

OFFICE OF THE HEARING EXAMINER

CITY OF TACOMA

REPORT AND RECOMMENDATION TO THE CITY COUNCIL

APPLICANT: Simpson Tacoma Kraft Company **FILE NO.**: 141.559

SUMMARY OF REQUEST:

A Shoreline Management Substantial Development Permit for a restoration project to construct substantial new riparian and wetland habitat and improve existing intertidal habitat on a 7.9 acre site. Primary actions will be to excavate and contour upland portions to restore a natural shoreline, vegetative plantings, debris removal or containment and modification of approximatley 3.3 acres of existing tidelands through excavation to intertidal elevations and filling to create a vegetative bench and create screening to support, compliment, and preserve existing tideflats. This action is not associated with any development project.

LOCATION:

The site is located on the southeastern shore of Middle Waterway adjacent to East 11th Street and Middle Waterway Road.

RECOMMENDATION:

Recommend approval, subject to conditions.

PUBLIC HEARING:

After reviewing the report of the Public Works Department, examining other available information on file with the application, and visiting the subject property and the surrounding area, the Hearing Examiner Pro Tem conducted a public hearing on the application on November 23, 1993.

FINDINGS, CONCLUSIONS AND RECOMMENDATION

FINDINGS:

1. Simpson Tacoma Kraft Company (Simpson) seeks to restore a portion of the Commencement Bay tideflats located on the southeastern shore of the Middle Waterway adjacent to East 11th Street and Middle Waterway Road. The overall project site includes 7.9 acres owned by Simpson, southwest of the company's Tacoma mill. The proposal is to rehabilitate existing intertidal habitat and to construct adjacent riparian and wetland habitat.

2. The site includes one of the few remaining remnants of the original Commencement Bay tideflats. Of approximately 2,074 acres of mudflat present 100 years ago, only about 180 acres of natural mudflat remain on the Bay.

3. The concept is to recreate a fragment of the mudflat/wetland ecosystem which characterized the area historically. About 3.3 acres of the total project site are proposed to be converted to wetland and riparian habitat to support and protect the natural tideflats.

4. The proposal involves the excavation and contouring of upland portions of the site to restore a natural shoreline. Excavation and grading will create tidal channels and wetlands like those in a natural estuary. Appropriate vegetation will be planted at the new elevations, resulting in new upper intertidal marsh areas and an adjoining riparian buffer. Approximately 7900 cubic yards will be excavated and 580 cubic yards will be dredged.

5. A minor amount of the excavated or dredged material (534 cubic yards) will be placed on a small portion of the mudflat to construct the sort of vegetative bench commonly found in estuarine marshes on Puget Sound. Excavated or dredged material not used on site to create this bench or for the riparian buffer on uplands will be removed from the site and deposited, graded and leveled on nearby Simpson property.

6. This project is in close proximity, and functionally related, to new intertidal habitat constructed by Simpson and Champion International Corporation at the north end of the Tacoma Kraft Mill in 1988, as part of the St. Paul Waterway Area Remedial Action and Habitat Restoration Project. The instant proposal is an additional habitat restoration project for the Commencement Bay environment funded by Simpson and Champion under the St. Paul Waterway Natural Resource Damage settlement agreement.

7. Planning and oversight for the project involves the Natural Resource Trustees for Commencement Bay (Trustees). The Trustees include the National Oceanographic and Atmospheric Administration, the U.S. Fish and Wildlife Service, the Washington Department of Ecology, the Muckleshoot Indian Tribe, and the Puyallup Tribe of Indians.

8. A factor influencing the site selection for this project is that the area does not appear to have significant contamination problems. The present uplands consist of sand and gravel fill overlain by sawdust and rotted bark. Soil and groundwater sampling of the property has produced no materials that would be classified as dangerous or hazardous wastes. A reconnaissance of the project site revealed wood debris, scrap metal, old tires and other miscellaneous junk. This occasional surface debris scattered throughout the area will be gathered and disposed of off-site. Samples from the bank at the head of the waterway contained brass foundry metal debris exceeding sediment cleanup objectives for some metals. This foundry debris will either be removed and disposed of off-site or contained on-site in a berm hummock in a manner that will isolate possible contaminants from the environment.

9. The restoration project is located within an identified problem area of the Commencement Bay/Nearshore Tideflats Superfund Site. Sediments in the Middle Waterway that will require remediation under Superfund will be defined based on future sediment sampling results. Prior to any activity on this project that impacts marine sediments, sampling will be conducted and any contaminated sediments found will be disposed of or contained in accordance with applicable environmental regulations. However, based on preliminary work it does not appear that removal or containment of material from the project site will require state or federal involvement through the Model Toxics Control Act or Superfund.

10. Simpson is working with the Washington Department of Ecology (Ecology) Urban Bay Action Team, the U.S. Environmental Protection Agency (EPA) Superfund Remedial Branch and the Ecology Sediments Management Unit to ensure the project's consistency with applicable programs and requirements regarding the handling of sediments and soils.

11. The purpose of the project is to enhance the habitat value of the Middle Waterway to shorebirds, fishes and other aquatic organisms. Goals include: (1) preserving the integrity of a remnant of the historic Commencement Bay tideflats, (2) providing valuable information for planning future restoration projects along Commencement Bay, (3) furnishing a functional connection to the new intertidal habitat constructed at the north shore of the Tacoma Kraft Mill, to the Puyallup delta and to other nearby intertidal and subtidal habitat, (4) providing a habitat education opportunity close to the Tacoma city center. In addition, the site modifications will be designed to complement possible new upland stormwater pollution prevention and treatment facilities under consideration for the Simpson property immediately north of the site. If these facilities are built, treated stormwater from the adjacent uplands could be used to support the wetland-estuarine habitat on the project site.

12. Before proceeding, the applicant will need to obtain a 404 permit from the U. S. Army Corps of Engineers, a hydraulic project approval from state fish and wildlife authorities, and approvals concerning water quality from Ecology. In addition, a clearing and grading permit will be required from the City of Tacoma. Detailed plans for

excavation, contouring and erosion control, for any on-site containment, for planting to establish new intertidal marsh and buffer vegetation, and for on-going monitoring and adaptive site management will be submitted to the City as part of the grading permit application.

13. The uses adjacent to the project site are a combination of water dependent and non-water dependent uses, including a fire station, utility substation, boat brokerage and industrial uses. East 11th Street is a four-lane arterial designated as a state highway. Union Pacific Railroad tracks are located directly east of the site, A City stormwater outfall is located at the south end of the site.

14. The site lies within the "S-10" Port Industrial Shoreline District, and is designated as "urban" in the *Tacoma Shoreline Master Program* (*TSMP*). The area upland of the shoreline district is zoned "M-3" Heavy Industrial Zoning District. Under Section 13.10.130, *Tacoma Municipal Code (TMC)*, industrial use is expressly permitted in the "S-10" district.

15. Because no wetlands above ordinary high water now exist on the site, the project is not subject to the requirements of the City's *Critical Areas Ordinance.*

16. Pursuant to the State Environmental Policy Act (SEPA), implementing state regulations and the City's Environmental Code, a Determination of Environmental Non-Significance (DNS) was issued for the project by the Director of Public Works. No appeal of this DNS was filed. The determination was based on an environmental checklist provided by the applicant, incorporating a separate project analysis document prepared by Prametrix Incorporated.

17. The Department of Public Works (DPW) Preliminary Report and Environmental Evaluation, as entered into this record as Exhibit 1, accurately describes the proposed project, general and specific facts about the proposal, and applicable provisions of the TSMP and regulatory codes. The report is incorporated herein by this reference as though fully set forth.

18. Written notice of the public hearing was mailed to all owners of property within 400 feet of the site at least 47 days prior to the date of the public hearing. In addition, notice of ;the application was published in the *Morning News Tribune* on October 7 and 21, 1993.

20. The application was circulated to appropriate city departments, public utilities and government agencies. No objections were received. EPA proposed language for a condition to deal with sampling intertidal and subtidal sediments and with disposal if contamination is found.

21. At the hearing, the applicant explained that Simpson is working with the Trustees on a cooperative agreement to address long-term protection and maintenance

of the project site. The applicant has committed to inserting a deed restriction preventing other use of the property by subsequent owners. The applicant also advised of its intention to negotiate with the Union Pacific Railroad in an effort to specify methods for avoiding disturbance to the area in the course of track maintenance.

22. The applicant noted that because of the sensitive nature of the habitat to be provided through the restoration project, physical access of the public to the land on the site will be discouraged. However, tentative plans have been made to build facilities for viewing access from a platform west of the site and to promote viewing from small boats such as kayaks. Viewing facilities, if constructed, will be handled as a separate application.

23. The applicant expressed a willingness to discuss with the City a program for on-going clean-up of the site to control the effects of any littering or unauthorized dumping.

24. A citizens' group, Citizens for a Healthy Bay, made written and oral comments, in general approving of the project, but expressing concerns about the proper disposal of brass foundry metal debris and about measures to control public use of the site in order to prevent vandalism and misuse.

25. One citizen, Cheryl Miller, expressed concerns about the process for this application. She is not opposed to the project on its merits, but stated her view that a conditional use permit should be required for this shoreline development because restoration projects of this kind are not among the listed uses in the applicable shoreline district. She also expressed concerns about the role of the Trustees and on-going control and management of the property.

26. Representatives of the Trustees presented testimony in favor of the project, emphasizing the importance of the undertaking in providing a field laboratory for the study of restoration techniques which might be used at other sites. Rapid action on the shoreline permit was urged in order to try to take advantage of the opportunity for initiating the planting plan this spring.

27. Any conclusion herein which may be deemed a finding is hereby adopted as such.

CONCLUSIONS:

1. The Hearing Examiner has jurisdiction over the parties and subject matter of this proceeding. Section 1.23.070.1; *Tacoma Municipal Code (TMC).*

2. The policy of the Shoreline Management Act explicitly speaks to the "utilization, protection, restoration, and preservation" of the shorelines of the state. The policy contemplates "protecting against adverse effects to the public health, the land and

its vegetation and wildlife and the waters of the state and their aquatic life." It speaks of preserving the public's opportunity to enjoy the "physical and aesthetic qualities of natural shorelines . . . to the greatest extent feasible." Uses are preferred which are "consistent with control of pollution and prevention of damage to the natural environment." Alterations of the "natural condition of the shorelines" are permitted only in "limited instances." Permitted uses "shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area." RCW 90.58.020. The underlying thrust of these policy pronouncements is that, whenever and wherever development is considered, the natural environment is to be maintained to the extent possible.

3. The habitat restoration project under consideration here is entirely consistent with the policy of the Act. Arguably, such projects could not be prohibited, but are allowed under the Act as a matter of law in any shoreline area. Seen against this policy background, the argument for employing a conditional use process here is not persuasive. The Examiner concludes that a substantial development permit is all that is necessary.

4. A shoreline conditional use permit is a statutory mechanism provided to deal with special situations involving developments not approvable in the ordinary course of carrying out the Act's policy. RCW 90.58.100(5). A conditional use permit is required where a particular kind of development is either specified as a conditional use or is not listed as a use permitted outright. *See* WAC 173-14-140. However, various activities which are not expressly identified as permitted uses are allowed without a conditional use process when incidentally necessary to constructing a permitted use, or when required in order to mitigate the adverse effects of a permitted use. Thus, a substantial development permit for a factory might include authorization for incidental excavation, even though excavation itself might not be on the list of permitted uses. Similarly, landscaping might be required around the same factory in a substantial development permit, as a mitigating feature, even though not itself among the listed uses permitted. The restoration project at issue is this sort of mitigating action incident to the permitted industrial use in the district.

5. It is doubtful that anyone would question that the instant proposal could be allowed under substantial development permit criteria, if it were proposed in conjunction with the construction of an industrial development. It would be viewed as a proper environmental condition, accessory to the principal use which is explicitly authorized in the district. *See* Section 13.10.130.D.13, *TMC*. In this case we deal with pre-existing industrial uses, such as the Simpson mill, which are part of the contemplated pattern of shoreline use in this area under Tacoma's shoreline program. The restoration project is made in response to the effects which such industrial developments have had over time. But, the fact that this project is not proposed concurrently with the initial industrial development should make no difference to the process for its approval. As a mitigating condition involving an accessory use, it is clearly allowable in the zone under the larger industrial use heading. Such a condition in a substantial development permit directly

implements the policy of the Act which calls for minimizing the "resultant damage" of permitted uses to the shoreline ecology and environment.

6. Under Section 13.10,180, *TMC*, an applicant for a substantial development permit must demonstrate consistency with the Shoreline Management Act, the TSMP, the *Land Use Management Plan* and applicable ordinances of the City and the intent and regulations of the specific shoreline district in which the proposed development is located. Findings have been entered, based upon the evidence in the record which support a conclusion that the restoration project, if conditioned as proposed below, will meet all of these requirements. It is designed to provide an enclave of protected natural shoreline within an urban designation in a shoreline district devoted principally to port and industrial development As such, it provides the kind of environmental balance contemplated by the Act as implemented by the TSMP and city ordinances.

7. The shoreline substantial development permit should be issued, subject to the following conditions:

A. SPECIAL CONDITIONS:

1. Construction of environmental improvements shall conform to the proposal as described in applicant's permit applications. As-constructed drawings shall be filed with the City upon completion.

2. The applicant shall conduct in-water work (e.g., placement of fill in an intertidal or subtidal area, or removal or dredging of sediments or soil at or below the MHHW level) in accordance with all applicable laws, including the federal Comprehensive Environmental Response, Compensation, and Liability Act (commonly referred to as "CERCLA" or "Superfund") and the State Sediment Management Standrds (ch. 173-204 WAC). Before conducting any activity that impacts marine sediments, the applicant shall contact and coordinate such efforts with the EPA Superfund Remedial Branch and the Ecology Sediment Management Unit. The applicant shall sample and evaluate the sediments that will be impacted to determine whether they are contaminated, and shall clean up any contaminated sediments that will be impacted in accordance with all applicable laws.

3. Before undertaking excavation activities on the project site, the applicant shall contact and coordinate any excavation and on-site containment or off-site removal and disposal of brass foundry debris found on the project site with the Ecology CB/NT Urban Bay Action Team to ensure consistency with EPA and Ecology Source Control Activities.

4. The applicant shall record a deed restriction on the portion of the project site exclusive of the railroad right-of-way. This deed restriction

shall impose use restrictions and other obligations on the applicant, its successors and assigns that are intended to ensure that the property provides habitat value in perpetuity in the Commencement Bay environment.

5. The applicant shall enter into negotiations with the Union Pacific Railroad to secure an agreement specifying how the railroad will perform its routine maintenance activities in a manner that is consistent with the proposed project.

6. The appliant shall enter into a cooperative agreement with the Natural Resource trustees for Commencement Bay addressing the long-term protection and maintenance of the project site. This cooperative agreement shall include an adaptive management and monitoring plan. In the event that monitoring shows that changes or additions to the project are necessary, as determined by the parties to the cooperative agreement, the applicant shall submit amendments for this permit, as appropriate.

7. City sewers shall be located in the field and measures taken to prevent damage to them during construction of the applicant's project. All dirt and debris tracked onto the right-of-way shall be removed promptly.

B. <u>USUAL CONDITIONS</u>:

1. The applicant shall comply with all federal, state, or local statutes, ordinances or regulations applicable to this project.

2. This permit may be rescinded pursuant to RCW 90.58140(8) of the Shoreline Management Act of 1971 and Chapter 13.10.330 of the City of Tacoma's Land Use Regulatory Code in the event the permittee fails to comply with any condition thereof.

3. If no appeal is filed within fourteen (14) days of the issuance of the Hearing Examiner's decision and the City Council votes to summarily concur in the decision of the Hearing Examiner, the matter will be transmitted to the State of Washington. However, if the City Council does not summarily concur with the Hearing Examiner's decision or an appeal is filed, the City Council will set a date for the determination of the matter. Subsequent to the determination of the City Council, the matter will be transmitted to the State. Construction pursuant to this permit will not begin or is not authorized until thirty (30) days from the date of filing the final order of the City of Tacoma with the Department of Ecology and Attorney General, or until all review proceedings initiated within thirty (30) days from the date of such filing have been terminated.

4. Construction or substantial progress toward construction of the authorized project must be taken within two (2) years after the approval of the permit by the City of Tacoma, or the permit shall terminate. If such progress has not been made, a new permit will be necessary. Local government may, however, at is discretion, extend the two-year time period for a reasonable time based on factors, including the ability to expeditiously obtain other governmental permits which are required prior to the commencement of construction.

5. If the authorized project has not been completed within five (5) years after the approval of the permit by the City of Tacoma, the City shall, at the expiration of the five-year period, review the permit, and upon showing of good cause, do either of the following:

1) Extend the permit for one (1) year; or

2) Terminate the permit.

PROVIDED that nothing herein shall preclude local government from issuing permits with a fixed termination date of less than five (5) years.

6. This permit may be rescinded pursuant to RCW 90.58.140(8) in the event the permittee fails to comply with any condition hereof.

7. The recommendation made herein is based upon representations made and exhibits, including project plans, submitted to the City and a part of the record. Any substantial changes or deviations in such plans or proposals or conditions of approval imposed (exclusive of refinements in the excavation and grading plan, planting plan, adaptive management and monitoring plan, construction methods, and similar actions resulting from review of the proposal by EPA, Ecology or other agencies with jurisdiction) shall be subject to the approval of the Hearing Examiner and may require further hearings.

8. Any finding herein which may be deemed a conclusion is hereby adopted as such.

RECOMMENDATION:

The application for a substantial development permit should be approved subject to the conditions set forth in Conclusion 7 above.

DATED this 20th day of December 1993.

Dick Dufford

WICK DUFFORD, Hearing Examiner Pro Tempore

TRANSMITTED this 20th day of December, 1993, via certified mail to:

Conrad Legal, Preston, Thorgrimson, Shidler, Gates & Ellis, Attorneys at Law, 1201 Pacific Avenue, Tacoma, WA 98402

TRANSMITTED this 20th day of December, 1993, to the following:

Dave McEntee, Simpson Tacoma Kraft Company, P. O. Box 2133, Tacoma, WA 98401
Fred Gardner, Toxics Cleanup Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600
M. Vernice Santee, Environmental Review Section, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600
Allison Hiltner, Remedial Project Manager, U.S. Environmental Protection Agency, Region 10, 1200 Sixth Avenue, Seattle, WA 98101
Citizens for a Healthy Bay, 771 Broadway, Tacoma, WA 98402-3700
Cheryl Miller, 3303 North 36th, Tacoma, WA 98407
City Clerk, City of Tacoma
Planning and Development Services Department, City of Tacoma (M. Smith)
Public Works Department, City of Tacoma (BLUS/Henderson)

N O T I C E

RECONSIDERATION AND APPEAL OF EXAMINER'S DECISION

RECONSIDERATION:

Any aggrieved person having standing under the ordinance governing such application and feeling that the decision of the Examiner is based on errors of procedure or fact may make a written request for review by the Examiner within fourteen (14) days of the issuance of the Examiner's decision or recommendation. This request shall set forth the alleged errors, and the Examiner may, after review of the record, take such further action as he deems proper and may render a revised decision. (Official Code of the City of Tacoma, Section 13.03.120)

APPEAL OF HEARING EXAMINER'S DECISION:

Within fourteen (14) days of the issuance of the Examiner's decision on a Shoreline Permit, the applicant, any aggrieved party owning property or residing within the area entitled to public notice by mail as set forth in Section 13.10.250 hereof, or any person who appeared in person, represented by counsel, or in writing at the Examiner's hearing, shall have the right to appeal the Hearing Examiner's decision to the City Council by filing written notice of appeal in duplicate with the City Clerk, stating the reasons the Hearings Examiner's decision was in error; provided, however, that in the event application is made pursuant to Section 13.03.120 of this Title for reconsideration by the Examiner, the appellant shall have five (5) days from the date of receipt of the Examiner's decision on the reconsideration to appeal the Examiner's decision to the City Council. Appeals shall be reviewed and acted upon by the City Council in accordance with Section 13.03.130 of this Title. (Official Code of the City of Tacoma, Section 13.10.280)

City of Tacoma
BUILDINGS DIVISION

NOTICE
Contractors must call 24 hours in advance for all inspections.

INSPECTION PHONE NUMBERS
Plumbing & Mechanical ...591-5005
Electrical .....383-2471, Ext. 277
Building 591-5004
Construction Division 591-5760

NOTICE
Post this card and approved plans conspicuously on construction site.

DATE ISSUED SEP 20 19 94
TO SIMPSON TACOMA KRAFT (Owner)/Contractor
TYPE OF WORK MIDDLE WATERWAY RESTORATION
ADDRESS 679 EAST 11TH STREET

REQUIRED	INSPECTION SCHEDULE	DATE	BY
I ___	Building (Footing)		
I ___	Building (Foundation wall(s))		
I ___	Plumbing (Groundwork)		
I ___	Energy (Slab perimeter insulation)		
II ___	Building (Slab) ***SEE NOTE BELOW***		
III ___	Plumbing (Rough-in)		
III ___	Mechanical (Rough-in)		
III ___	Gas Piping		
III ___	Electrical (Rough-in)		
III ___	Energy (Caulking)		
IV ___	Building (Framing) ***SEE NOTE BELOW***		
V ___	Energy (Insulation)		
V ___	Building (Drywall)		
VI ___	Plumbing (Final)		
VI ___	Mechanical (Final)		
VI ___	Electrical (Final)		
VI ___	Construction Division (sidewalks & sanitary sewer hook-up)		
VI ___	Energy (Final)		
VII ___	Building (Final) ***SEE NOTE BELOW***		

NOTE—Inspections listed as required inspections must be obtained in the numerical order indicated by the Roman numerals.

PERMITS:
Building # 943195 Contractor OWNER
Plumbing # _____ Contractor _____
Heating # _____ Contractor _____
Electrical _____ Contractor _____
Sanitary Sewer # _____ Sidewalks # _____

WARNING: It is unlawful to occupy the premises until all applicable final inspections have been made.

PWK 4125 0005 (06/88)

SUPPLEMENTAL INSPECTIONS ON BACK

Kim

CITY OF TACOMA

Department of Public Works
Division of Building and Land Use Services

747 Market Street
Tacoma, WA 98402
(206) 591-5004

BUILDING PERMIT

CASE NO: BLD95-00192 ISSUED: 5/24/95 EXPIRES:
PROJECT:
SITE ADDRESS: 922 E 11TH ST
PARCEL NO: 8950001252 CITY PARCEL KEY: 17440015
SUBDIVISON: TACOMA TIDELANDS LOT AND BLOCK: POR B 42 43 43A 44 44A 44B &

PROJECT DESCRIPTION:
GRADE 480 CUBIC YARDS FOR SURCHARGE #1 AT INDUSTRIAL SITE

OWNER	CONTRACTOR	
SIMPSON TACOMA LAND CO C-1 PARCEL CAR P.O.BOX 2133	RUSHFORTH CONSTRUCTION CO 1308 ALEXANDER AVE E TACOMA, WA 98424 922-1884	Lic#: RUSHFC*305R1 Exp Date: 6/30/95

Zoning:	Construction Type / Fire Protection			Building Use	
City Contact: PKA	Constr Type 1:	Sprinklers?:		Occ Grps	Use Codes
Type of Permit: BLD	Constr Type 2:	Sprinkler Type:		1	
Resid/Comm: C	Constr Type 3:	Sprinkler Installation:	Est Value:	2	
No of Units:		Other Fire Suppr Syst:		3	
Estimated Value:		Type of Suppr System:	Est Value:	4	
Type of Work:		Fire Alarm System:	Est Value:	6	

Building Area		Sign Information	
Number of Floors:	Det Garage/Carport:	Type of Business:	Street Frontage:
Total Floor Area:	Storage Bldgs:	Free/Wall:	Tenant Frontage:
Attached Garage:	Other Accessory Bldg:	Illuminated:	Total Height:
Basement:	Miscellaneous:	Exstng Face Area:	Sign Width:
Decks:		New Face Area:	Sign Height:
Other Area:	Total Acc Bldg Area:	No of Faces:	Sign Area:
Total Main Bldg Area:		Total Face Area:	

All plumbing, heating, and electrical work will be performed by either the homeowner or by a contractor licensed to do same.
Separate permits are required for other work, including but not limited to, sanitary and storm sewer, sidewalk, curb and gutter, driveways, parking lot paving, street improvements, plumbing, mechanical, fire protection, and signs.

X_____
Signature of Owner/Contractor

THIS PERMIT SHALL BECOME NULL AND VOID IF ANY OF THE ABOVE
INFORMATION IS FOUND TO BE INCORRECT.

FEES

Type	Amount
Permit issuance fee	$102.00
Plan Review fee	$32.50
State building permit fee	$4.50
Strong Motion Instr. Fund	$10.20
Total	$149.20

PAID

Kim

CITY OF TACOMA

Department of Public Works
Division of Building and Land Use Services

747 Market Street
Tacoma, WA 98402
(206) 591-5004

BUILDING PERMIT

CASE NO: BLD95-00210 ISSUED: 5/26/95 EXPIRES:
PROJECT:
SITE ADDRESS: 922 E 11TH ST
PARCEL NO: 8950001262 CITY PARCEL KEY: 17440015
SUBDIVISON: TACOMA TIDELANDS LOT AND BLOCK: POR B 42 43 43A 44 44A 44B &

PROJECT DESCRIPTION:
GRADE & FILL APPROXIMATELY 100,000 CUBIC YARDS

OWNER	CONTRACTOR
SIMPSON TACOMA LAND CO C-1 PARCEL CAR PO BOX 2133	RUSHFORTH CONSTRUCTION CO Lic#: RUSHFC*305R1 1308 ALEXANDER AVE E Exp Date: 6/30/95 TACOMA, WA 98424 922-1884

Zoning:	Construction Type / Fire Protection			Building Use	
City Contact: KSC	Constr Type 1:	Sprinklers?:		Occ Grps	Use Codes
Type of Permit: BLD	Constr Type 2:	Sprinkler Type:		1	MI
Resid/Comm: C	Constr Type 3:	Sprinkler Installation:	Est Value:	2	
No of Units:		Other Fire Suppr Syst:		3	
Estimated Value:		Type of Suppr System:	Est Value:	4	
Type of Work:		Fire Alarm System:	Est Value:	5	

Building Area		Sign Information	
Number of Floors:	Det Garage/Carport:	Type of Business:	Street Frontage:
Total Floor Area:	Storage Bldgs:	Free/Wall:	Tenant Frontage:
Attached Garage:	Other Accessory Bldg:	Illuminated:	Total Height:
Basement:	Miscellaneous:	Exstng Face Area:	Sign Width:
Decks:		New Face Area:	Sign Height:
Other Area:	Total Acc Bldg Area:	No of Faces:	Sign Area:
Total Main Bldg Area:		Total Face Area:	

All plumbing, heating, and electrical work will be performed by either the homeowner or by a contractor licensed to do same.
Separate permits are required for other work, including but not limited to, sanitary and storm sewer, sidewalk, curb and gutter, driveways, parking lot paving, street improvements, plumbing, mechanical, fire protection, and signs.

X_____
Signature of Owner/Contractor

THIS PERMIT SHALL BECOME NULL AND VOID IF ANY OF THE ABOVE INFORMATION IS FOUND TO BE INCORRECT.

FEES

Type	Amount
Permit fee	$600.00
Plan Review fee	$175.00
Strong Motion Instr. Fund	$60.00
State building permit fee	$4.50
Total	$839.50

PAID

Km

GRADING PERMIT CONDITIONS

Project: Portland Ave Warehouse Project for Simpson Tacoma Land Co.
Location: 922 East 11th Street
Quantity: Cut is 25,000 CY and Fill is 100,000 CY
DNS: Environmental Checklist being reviewed under separate application
Decision: Approved per the following conditions
Date: April 26, 1995

1. All work to be done in accordance with approved plan, soils report, and Chapter 70 of the 1991 Uniform Building Code.

2. There shall be no material on city streets or other right of way at any time.

3. No material shall be allowed to enter catch basins and/or the city's storm sewer system. Clean out shall be at the permit holders expense.

4. Watering provisions must be in place at all times so no dust becomes air borne - violation of this condition will resort in a stop work order until corrected.

5. Fill to be placed that will support future foundations shall be placed under the inspection of a licensed Geotechnical Engineer. Soil to be placed shall be tested and compacted to 90 percent of its maximum density. Engineer shall document existing site conditions, soil and its placement and allowable bearing capacity submitted. Standard requirements for cuts and fill as contained in Chapter 70 of the Uniform Building Code as amended by the City of Tacoma shall be complied with.

6. Erosion Control Measures
   A. All erosion control shall be in place prior to clearing.
   B. Erosion control measures shall be maintained at all times to the approval of the Building Official.
   C. Should temporary erosion and sedimentation control measures, as shown on plans become inadequate, the contractor shall install facilities as necessary to protect adjacent properties and the Puget Sound drainage system, meeting approval of the Building Official.

7. Inspections. Call for inspection of the Building Official at 591-5001 upon completion of:
   A. Staking of clearing limits.
   B. Installation of erosion control and prior to site grading.
   C. Prior to removal of erosion control devices.

8. All demolition material and debris removed from site shall be placed only at a permitted site. Verify location of destination of material prior to exportation.

9. Traffic control provisions as approved by the traffic engineer shall be adhered to at all times.

10. Trees

A. Trees removed shall be clearly marked for removal.

B. Trees to be saved shall be fenced with barricade fence at the drip line (outer edge of tree branches) to keep construction vehicles from compacting root zone and killing trees. This fencing shall be maintained until construction ends.

11. Hydroseeding

A. All areas that are cleared and grubbed, graded, excavated or filled are subject to hydroseeding. Any of these areas that are left unpaved or unlandscaped shall be hydroseeded under the direction and approval of the Building Official.

B. Hydroseed only during the periods of April 1 though May 31 or September 1 though October 15. This hydroseeding requirement may be met during the months of June through August if irrigation is provided.

C. Maintain hydroseeding throughout the winter wet season.

D. No grading will be permitted after October 15th.

Signed By: _____

Date: _____

Re: Middle waterway Permits

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-2255

REPLY TO ATTENTION OF

Regulatory Branch

SEP 19 1994

Simpson Tacoma Kraft Company
Post Office Box 2133
Tacoma, Washington 98401

Reference: 93-2-01466

Gentlemen:

Enclosed is a Department of the Army permit which authorizes performance of the work described in your referenced application.

You are cautioned that any change in the location or plans of the work will require submittal of a revised plan to this office for approval prior to accomplishment. Deviation from approved plans may result in imposition of criminal or civil penalties.

Your attention is drawn to General Condition 1 of the permit which specifies the expiration date for completion of the work. You are requested to notify this office of the date the work is completed.

Sincerely,

Thomas F. Mueller

Thomas F. Mueller
Chief, Regulatory Branch

RECEIPT Date September 19 94 1244

Received From Simpson Tacoma Kraft Co

Address PO Box 2133 Tacoma Wa 98401

one hundred Dollars $100.00

For Simpson Tacoma Kraft Co
93-2-01466

ACCOUNT			HOW PAID		
AMT. OF ACCOUNT	100	00	CASH		
AMT. PAID	100	00	CHECK	✓	
BALANCE DUE	—		MONEY ORDER		

Check # 141781

By Susan Powell

Certification of Compliance with Department of the Army Permit

Permit Number: 93-2-01466

Name of Permittee: SIMPSON TACOMA KRAFT COMPANY

Date of Issuance: SEP 19 1994

Upon completion of the activity authorized by this permit, sign this certification and return it to the following address:

Department of the Army
Seattle District, Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-2255

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit.

_____

Signature of Permittee

DEPARTMENT OF THE ARMY PERMIT

Permittee: Simpson Tacoma Kraft Company

Permit No: 93-2-01466

Simpson Tacoma Kraft Company
Post Office Box 2133
Tacoma, Washington 98401

Issuing Office: Seattle District

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The work is to modify approximately 3.3 acres of degraded, natural tideflats and created uplands to support, compliment, and preserve the integrity of the existing mudflats at the head of the Middle Waterway, Commencement Bay at Tacoma, Pierce County, Washington. Primary actions at the project site will include: excavating a total of approximately 7,900 cubic yards of material in uplands and wetlands to create tidal channels and wetlands similar to those existing in a natural estuary. This includes dredging approximately 500 cubic yards of material in an existing intertidal wetland area on the project site to about +8 to +9 MLLW; overdredging 160 cubic yards of contaminated material in the existing mudflat area and backfilling this with clean material; discharging about 534 cubic yards of the dredged material onto the existing mudflat on the site to construct an approximately 0.23 of an acre vegetated bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries. In addition, upland areas will be contoured in an attempt to restore a natural shoreline; metal debris found on the site will be placed three feet below the surface, covered with a plastic liner or one foot clay layer, and covered by at least 2 feet of clean on-site fill as part of the berm construction; and appropriate natural vegetation will be planted at the new elevations to produce new upper intertidal marsh areas and an adjoining riparian buffer. Excess excavated or dredged material will be removed from the site and deposited, graded and leveled on the upland portion of the Simpson property. This work is not associated with any development project.

Project Location: In Middle Waterway, Commencement Bay, Tacoma, Washington.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on SEP 19 1997. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in accordance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification to this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify

this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

a. You must provide a copy of the permit transmittal letter, the permit form, and drawings to all contractors performing any of the authorized work.

b. You must comply with the provisions of the attached Water Quality Certification.

c. A restoration monitoring report, as described in the Middle Waterway Shore Restoration Project Monitoring and Adaptive Management Plan, dated April 1994, or status report, if construction of project has not started, will be submitted to the District Engineer 13 months after the date of permit issuance. In addition, restoration monitoring reports will be submitted to the District Engineer 12 months from the date of the first monitoring report, or status report, if construction has not started, on an annual basis for the next consecutive five year period.

d. This permit does not exclude the permittee from liability under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended (42 U.S.C. 9601 et.seq.) of the 1989 Washington State Model Toxic Control Act (R.C.W. 70.105), nor does the permit waive any liability for response costs, damages, and any other cost that may be assessed under CERCLA. Additionally, the permittee will be financially responsible for any logistic problems associated with the construction and operation of this project and potential cleanup operation in this portion of Commencement Bay.

e. You must take the actions required to record this permit with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(x) Section 10 of the Rivers and Harbor Act of 1899 (33 U.S.C. 403).

(x) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of the permit.

b. The information provided by you in support of your application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X [signature] August 5, 1994
Simpson Tacoma Kraft Company (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

for Tom F. Mueller September 19, 1994
DONALD T. WYNN (DATE)
Colonel, Corps of Engineers
District Engineer

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

This notice of authorization must be conspicuously displayed at the site of work.

United States Army Corps of Engineers

A permit to EXCAVATE APPROXIMATELY 7,900 CU YDS OF MATERIAL IN WETLANDS, DREDGE APPR 500 CU YDS IN AN INTERTIDAL WETLAND AREA, OVERDREDGE 160 CU YDS OF CONTAMINATED MATERIAL, BACKFILL WITH CLEAN MATERIAL, DISCHARGE APPR 534 CU YDS OF DREDGED MATERIAL ONTO MUDFLAT (TO CREATE TIDAL CHANNELS AND WETLANDS) IN MIDDLE WATERWAY, COMMENCEMENT BAY

at TACOMA, WASHINGTON

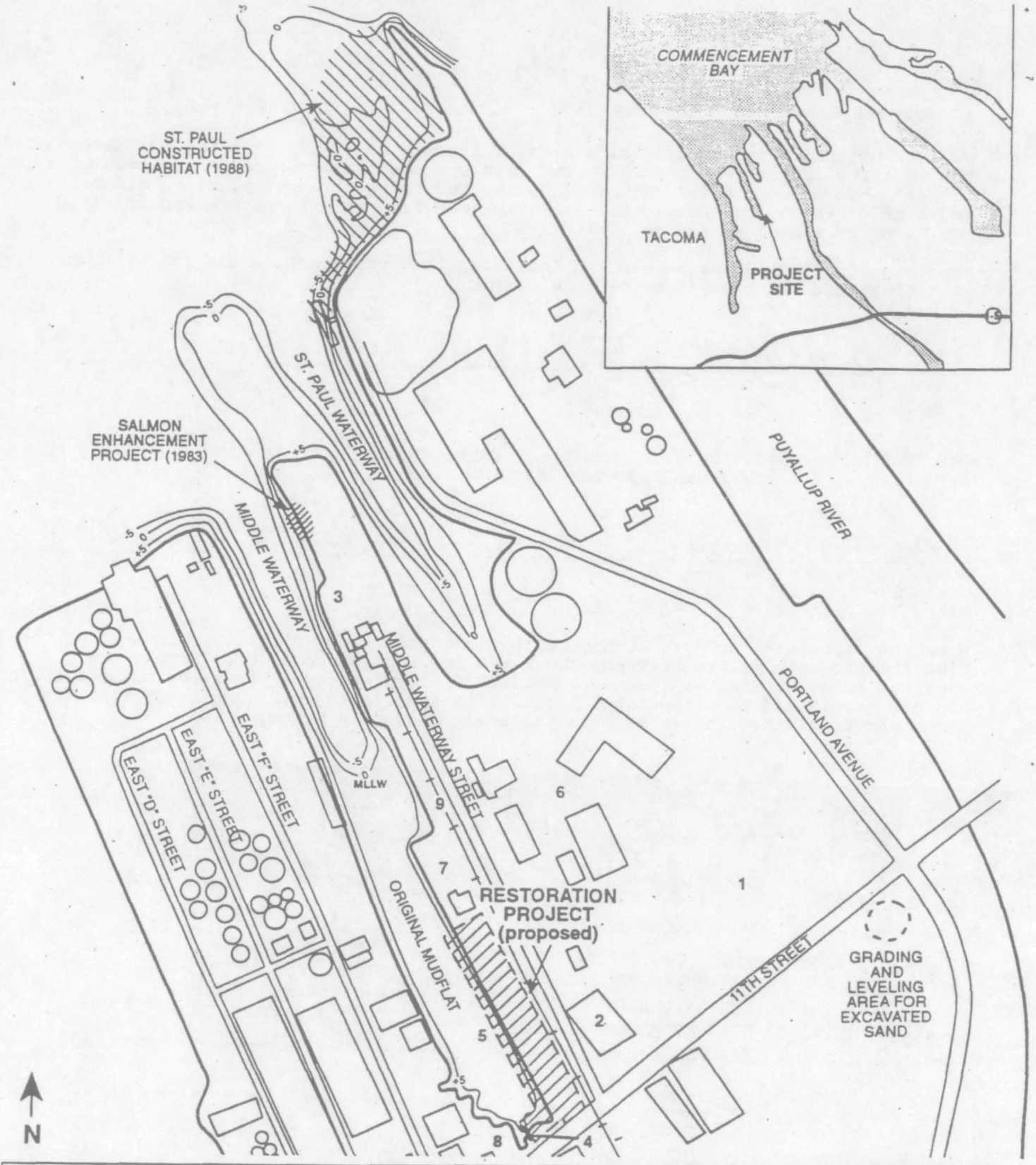
has been issued to SIMPSON TACOMA KRAFT COMPANY **on** SEP 19 **19** 1994

Address of Permittee POST OFFICE BOX 2133, TACOMA, WA 98401

Permit Number

93-2-01466

for Tom F. Mueller
DONALD T. WYNN
District Commander
COLONEL, CORPS OF ENGINEERS



PURPOSE: Restoration of Riparian and Wetland Habitat
DATUM: MLLW
ADJACENT PROPERTY OWNERS:
1 Commencement Bay Mill Co.
2 Morse Industrial
3 Foss Towing/Foss Maritime
4 City of Tacoma
5 State of Washington/DNR
6 Investco Financial Corp.
7 Paxport Mills, Inc.
8 Pacific Yacht Basin
9 Union Pacific Railroad

FIGURE 1

VICINITY MAP, MIDDLE WATERWAY SHORE RESTORATION, COMMENCEMENT BAY

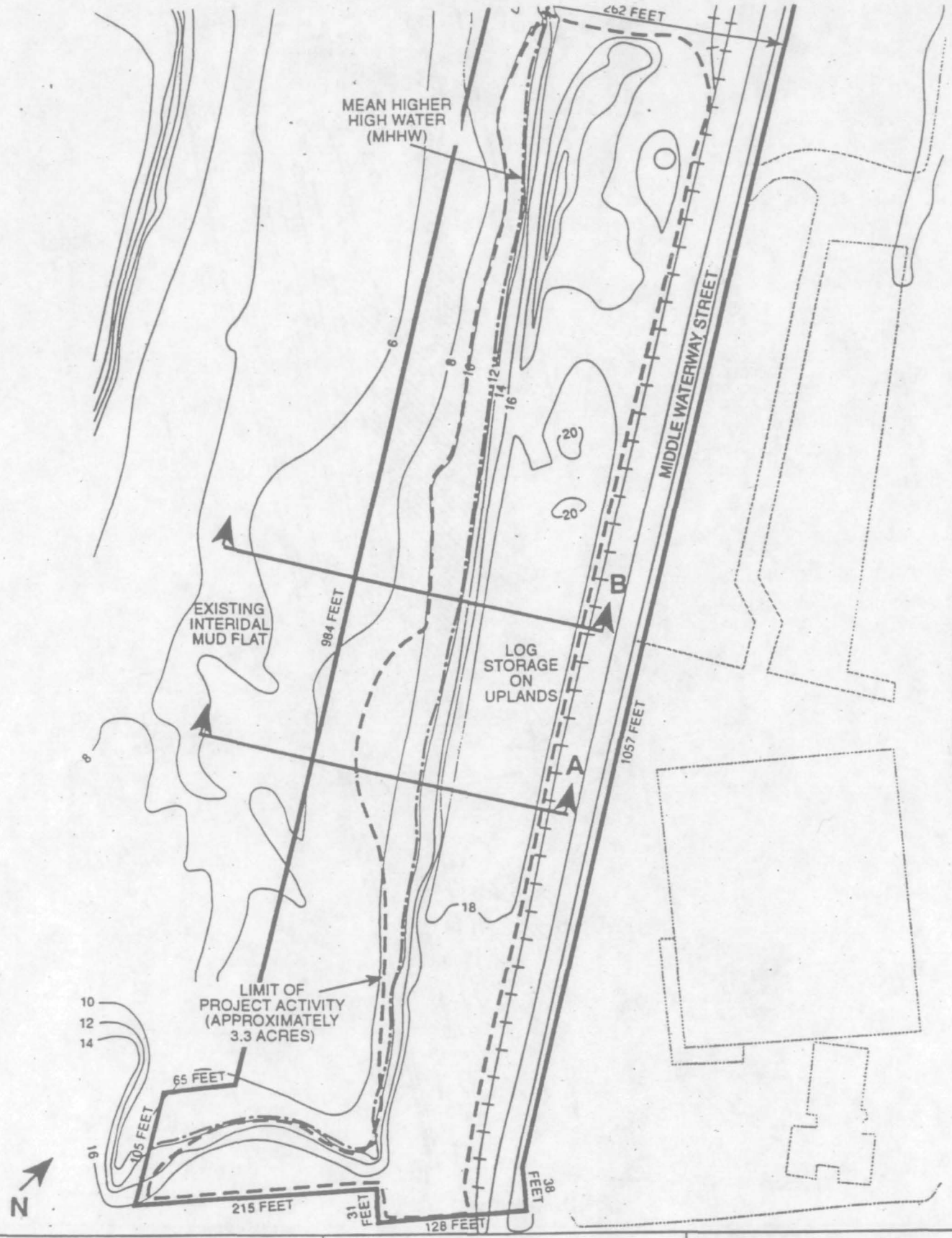
0 600 1200
1" = 600'

PROJECT #199301466

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

1 of 5



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8 Pacific Yacht Basin

FIGURE 2

PLAN VIEW (PRE-PROJECT), MIDDLE WATERWAY SHORE RESTORATION, COMMENCEMENT BAY

0 100 200
1" = 100'

PROJECT #199301466

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

2 of 5

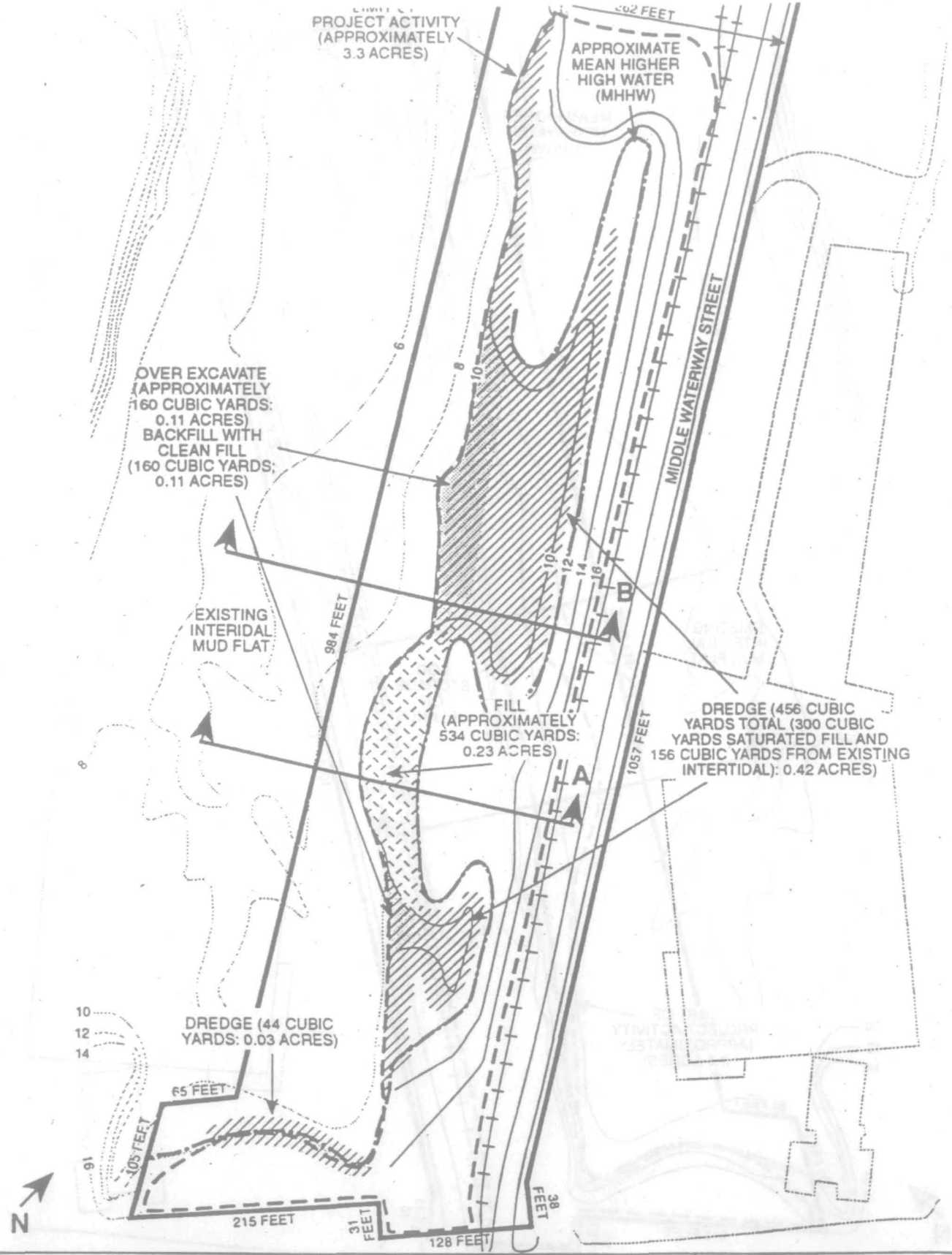

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FIGURE 3

PLAN VIEW
DREDGE AND FILL FOR THE
MIDDLE WATERWAY SHORE RESTORATION

Existing Grades
Proposed Grades

0 100 200
1" = 100'

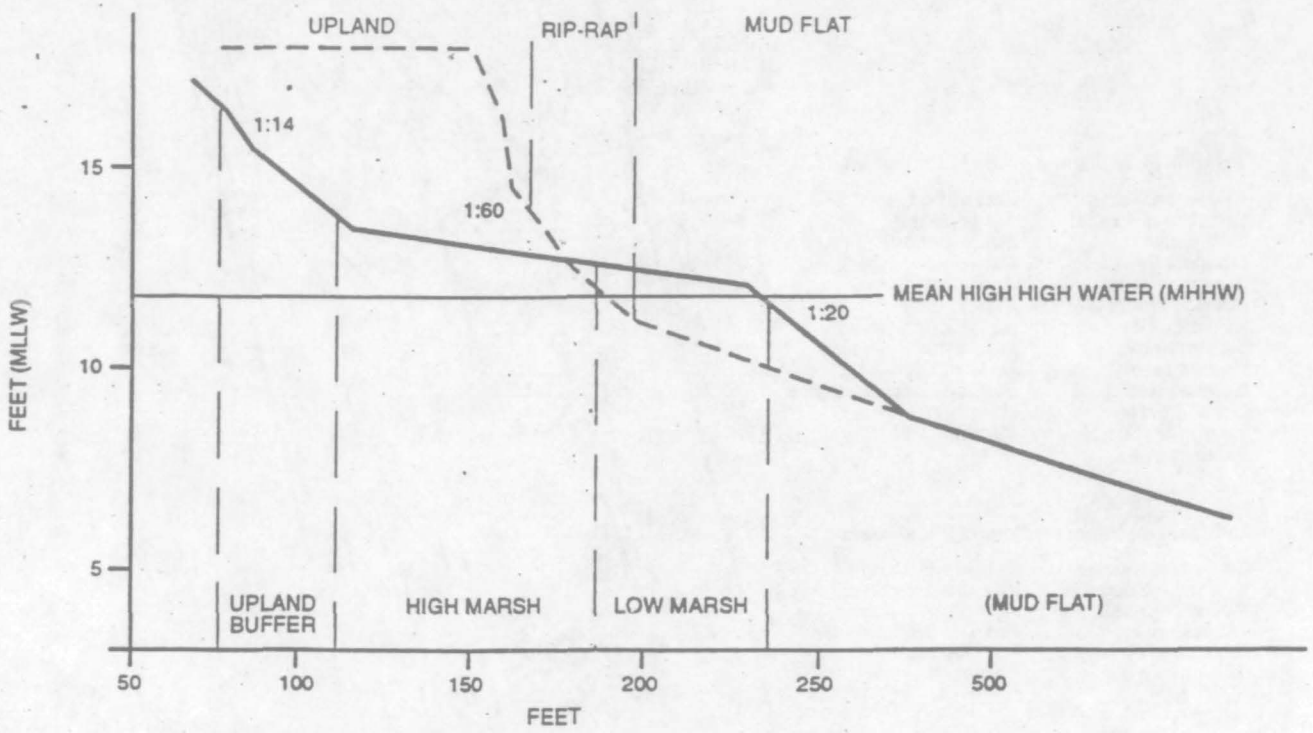
PROJECT #199301466

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

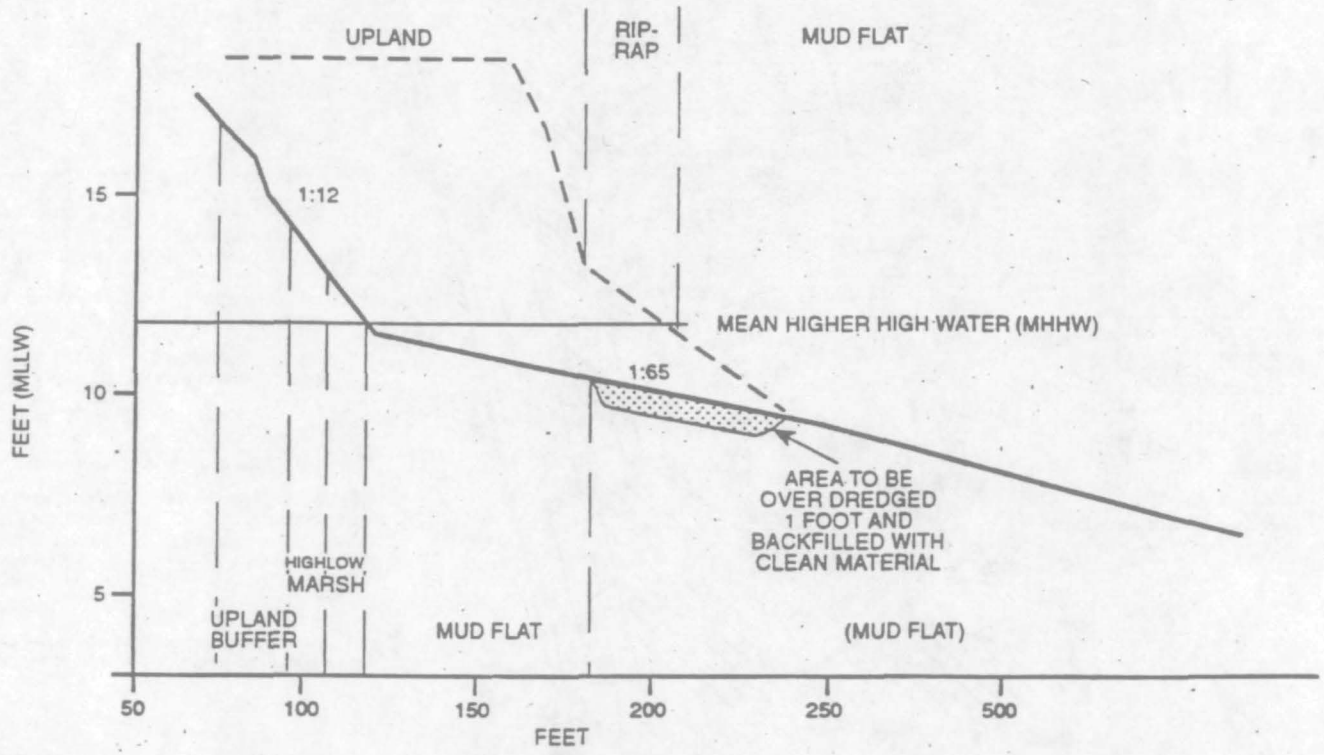
IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

2 of 6

CROSS SECTION A



CROSS SECTION B



PURPOSE: Restoration of Riparian and Wetland Habitat
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9 Union Pacific Railroad

FIGURE 4

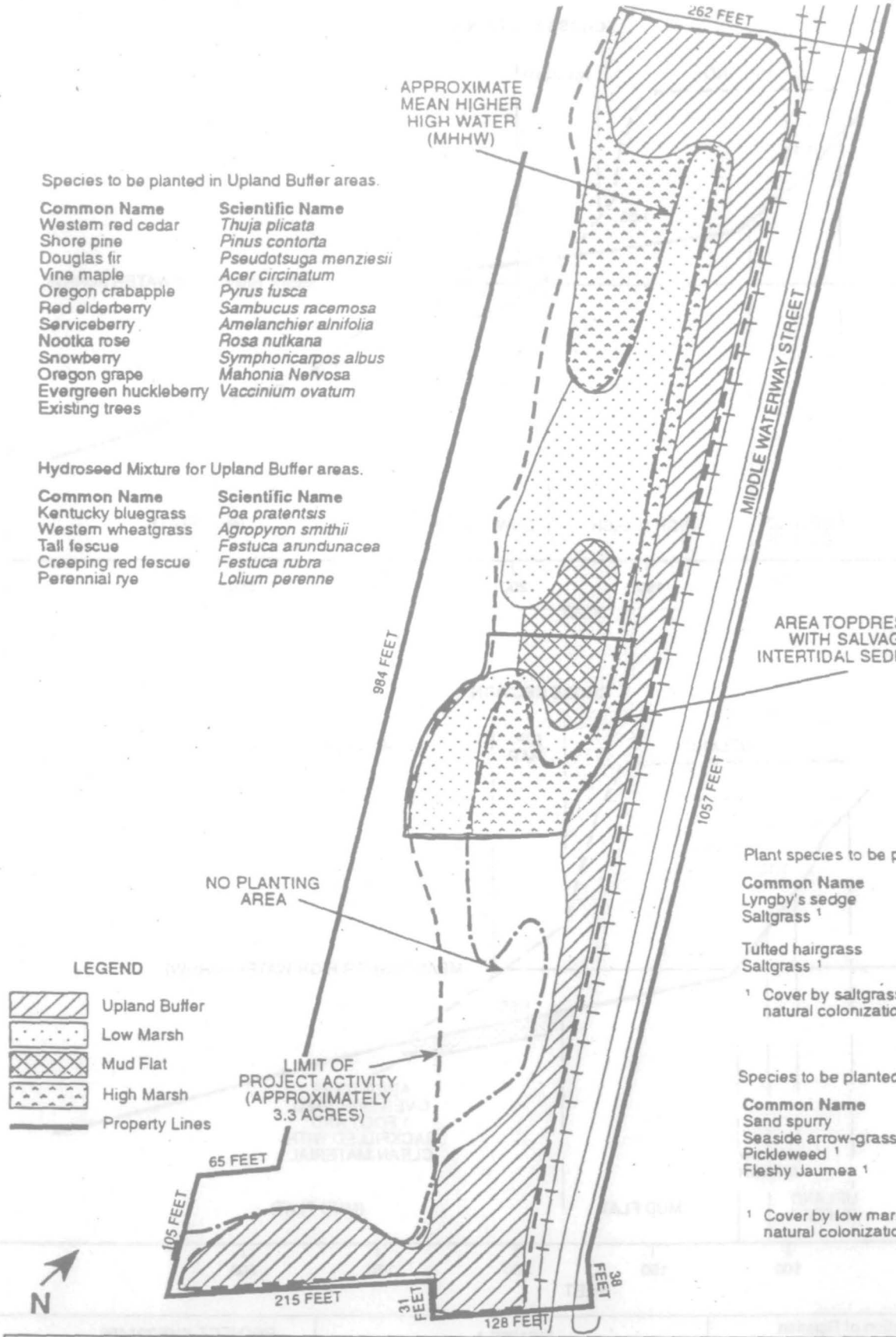
CROSS SECTION OF PROPOSED HABITAT RESTORATION

VERTICAL:HORIZONTAL
1:10

PROJECT #199301466

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company



Species to be planted in Upland Buffer areas.

Common Name	Scientific Name
Western red cedar	*Thuja plicata*
Shore pine	*Pinus contorta*
Douglas fir	*Pseudotsuga menziesii*
Vine maple	*Acer circinatum*
Oregon crabapple	*Pyrus fusca*
Red elderberry	*Sambucus racemosa*
Serviceberry	*Amelanchier alnifolia*
Nootka rose	*Rosa nutkana*
Snowberry	*Symphoricarpos albus*
Oregon grape	*Mahonia Nervosa*
Evergreen huckleberry	*Vaccinium ovatum*
Existing trees	

Hydroseed Mixture for Upland Buffer areas.

Common Name	Scientific Name
Kentucky bluegrass	*Poa pratentsis*
Western wheatgrass	*Agropyron smithii*
Tall fescue	*Festuca arundunacea*
Creeping red fescue	*Festuca rubra*
Perennial rye	*Lolium perenne*

Plant species to be planted in the high marsh.

Common Name	Scientific Name
Lyngby's sedge	*Carex lyngbyei*
Saltgrass [1]	*Distichilis spicata*
Tufted hairgrass	*Deschampsia caespitosa*
Saltgrass [1]	*Distichilis spicata*

[1] Cover by saltgrass will be primarily through natural colonization and on-site salvage.

Species to be planted in low marsh areas.

Common Name	Scientific Name
Sand spurry	*Spergulana marina*
Seaside arrow-grass	*Triglochin maritimum*
Pickleweed [1]	*Salicornia virginica*
Fleshy Jaumea [1]	*Jaumea carnosa*

[1] Cover by low marsh species will be through natural colonization and on-site salvage.

PURPOSE: Restoration of Riparian and Wetland Habitat
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FIGURE 5

PLAN VIEW
MIDDLE WATERWAY SHORE
RESTORATION VEGETATION PLANTING PLAN

0 100 200
1" = 100'

PROJECT #199301466

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

Rule
Middle Waterway Proj
Permit Rule

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600 • (206) 407-6000 • TDD Only (Hearing Impaired) (206) 407-6006

June 21, 1994

Simpson Tacoma Kraft Company
Post Office Box 2133
Tacoma, Washington 98401

ATTN: Mr. Dave McEntee

Re: Water Quality Certification
Public Notice No. 93-2-01466
Simpson Tacoma Kraft Company

Dear Mr. McEntee:

The public notice for the above referenced Corps of Engineers permit has been reviewed in accordance with all pertinent rules and regulations. The proposed project entails excavating approximately 7,900 cubic yards of material in uplands and wetlands to create tidal channels and wetlands, dredging approximately 500 cubic yards of material in an existing intertidal wetland area to about +8 to +9 MLLW; overdredging 160 cubic yards of contaminated material in the existing mudflat area with approved upland disposal, and backfilling with clean material. Project also includes discharging about 534 cubic yards of the clean dredged material onto the existing mudflat on the site to construct approximately 0.23 acres of vegetative bench.

Additionally, upland areas will be contoured in an attempt to restore a natural shoreline; metal debris from the site will be contained, along with planting of appropriate natural vegetation at the new elevations to produce new upper intertidal marsh areas and an adjoining riparian buffer. Excavated material not used on site will be deposited, graded and leveled on a nearby upland Simpson property. This work will be performed in Commencement Bay, Tacoma, Pierce County, Washington and is not associated with any development project.

This agency certifies these activities comply with applicable provisions of sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act as amended, and other appropriate requirements of State law. This certification is subject to compliance with the provisions of the enclosed Hydraulic Project Approval from the Department of Fish and Wildlife, and the following:

GENERAL CONDITIONS:

1. Care shall be taken to prevent any petroleum products, chemicals, or other toxic or deleterious materials from entering the water. If an oil sheen or distressed or dying fish are observed in the project vicinity, the operator shall cease immediately and notify the Department of Ecology of such conditions. Contact Ecology's Southwest Regional Spill Response Office at (206) 407-6300.

2. Work in or near the waterway shall be done during low tides in order to minimize turbidity, erosion and other water quality impacts.

WETLAND CONSTRUCTION AND MONITORING:

3. Unless otherwise stated, construction activities shall be in accordance with the applicant's blueprints, entitled "*Middle Waterway Shore Restoration*", prepared by Parametrix, dated May 1994 and its revision, dated June 1994.

4. Unless otherwise stated, monitoring activities shall be in accordance with the applicant's report entitled "*Middle Waterway Shore Restoration Project Monitoring and Adaptive Management Plan*", prepared by Parametrix, dated April 1994.

5. All planted vegetation, and other habitat enhancements shall be protected and maintained, with a sufficient barrier to human traffic placed on either side of the revegetated wetland areas to prevent impacts to plantings.

6. All plant variations or substitutions to the proposed planting scheme contained in the mitigation plan shall be coordinated with the department. Please contact Perry Lund of Ecology's Wetland Section at 407-7260 concerning this requirement.

7. Monitoring of the wetland site shall be performed annually through year five (5). Copies of monitoring reports should be sent to Department of Ecology, Southwest Regional Office, Post Office Box 47600, Olympia, WA 98504-7600.

DREDGING/EXCAVATION CONDITIONS:

8. The upland disposal of dredged material (material not used in project construction) shall be into a dewatering basin that is properly designed, constructed, and maintained to contain the dredged material and any associated slurry. A supply of extra berm material or sandbags shall be available if needed to repair or reinforce the basin structure.

DREDGED MATERIAL TRANSPORT:

9. Dredged material shall be transported in a manner that prevents the dredged material, leachates, or drainage from the material from entering state waters, including wetlands.

10. Any vehicle transporting dredged material shall be suitably equipped to prevent the spillage of slurry water while enroute to the disposal site.

CONTINGENCY MEASURES:

11. Unless significant contingency fund expenditures occur early in the project development, a minimum of 40% of the contingency fund should be maintained through the third growing season to ensure adequate opportunity exists for site improvements.

12. Wetland monitoring reports shall be provided for review on an annual basis to Perry Lund, Wetland Specialist, Southwest Regional Office, Department of Ecology. In addition, the applicant shall submit a written report within thirty days after completion of the project. The report will identify restoration measures and certify that the restoration is in place.

DEED RESTRICTION:

13. Applicant will record a deed restriction on the property as provided in the Coorporative Agreement between Simpson Tacoma Kraft Company and the Natural Resource Trustees.

Please note this certification does not exempt, and is provisional upon, compliance with other statutes and codes administered by federal, state and local agencies.

If you have any questions about this certification, please contact Patricia Trerice at (206) 407-6595.

Sincerely,

Keith E. Phillips, Supervisor
for Environmental Review and
Sediment Management Section

Enclosure

cc: COE, Lori Morris
EPA, Seattle, John Malek
Muckleshoot Indian Tribe, Rod Malcom
Puyallup Tribe of Indians, Bill Sullivan
USF&WS
NOAA, Seattle, Robert Clark
NMFS, Portland, Ben Meyer
WDF&W, Randy Carman
WDOE, K-Y Su, P. Lund, R. Gersib, Fred Gardner

DEPARTMENT OF FISHERIES

HYDRAULIC PROJECT APPROVAL

R.C.W. 75.20.100
R.C.W. 75.20.103

[4] June 10, 1994
(applicant should refer to this date in all correspondence)

PAGE 1 OF 2 PAGES

DEPARTMENT OF FISHERIES
General Administration Bldg.
Olympia, Washington 98504
(206) 753-6650

[10] LAST NAME: Simpson Tacoma Kraft Company			[18] CONTACT PHONE(S): 596-0257	[1] CONTROL NUMBER: 93-S1466-02	
[19] STREET OR RURAL ROUTE: P.O. Box 2133, ATTN: Dave McEntee				[7] [8] [9] WRIA: 10.MARI	
CITY: Tacoma		STATE: WA	ZIP: 98401	[14] [17]	
[12] WATER: Middle Waterway		TRIBUTARY TO: Commencement Bay		[11] TYPE OF PROJECT: Excavation to Create Wetlands & Tidal Channels	
[13] QUARTER SECTION	SECTION: 33&4	TOWNSHIP: 20&21	RANGE(E-W): 03E	COUNTY: Pierce	

TIME LIMITATIONS: [5] THIS PROJECT MAY BEGIN: June 15, 1994 — [6] AND MUST BE COMPLETED BY: March 15, 1996

THIS APPROVAL IS TO BE AVAILABLE ON THE JOB SITE AT ALL TIMES AND ITS PROVISIONS FOLLOWED BY THE PERMITTEE AND OPERATOR PERFORMING THE WORK.

SEE IMPORTANT GENERAL PROVISIONS ON REVERSE SIDE OF APPROVAL

NOTE: Washington Department of Fish and Wildlife (WDFW) reviewed your plans appearing in Corps of Engineers Public Notice 93-2-01466, received on May 24, 1994, and inspected the site of the proposed project on April 21, 1994.

1. This project is approved, as illustrated in your application, subject to the following provisions.
2. The applicant or contractor shall notify the Regional Habitat Manager listed below by fax, (206) 902-2946, or mail. Notification shall be received at least seven working days prior to the start of construction activities.
3. Work below the ordinary high waterline shall not occur from March 15 through June 14 of any year for the protection of migrating juvenile salmonids.
4. Project activities shall not occur when the project area is inundated by tidal waters.
5. Trenches, depressions, or holes created in the intertidal area that could potentially entrap fish during high tides shall be connected to lower tidal areas by channels (to create escape routes) or backfilled prior to inundation by tidal waters.

SEPA: DNS by City of Tacoma - October 22, 1993
REGIONAL HABITAT MANAGER - Randy Carman (206) 902-2573
PATROL - Tuggle [2]
APPLICANT - WILDLIFE - READER - PATROL - HAB. MGR. - WRIA

DEPARTMENT OF FISHERIES R. Dmitry Flint for DIRECTOR

DEPARTMENT OF FISHERIES

HYDRAULIC PROJECT APPROVAL

R.C.W. 75.20.100
R.C.W. 75.20.103

[4] June 10, 1994
(applicant should refer to this date in all correspondence)

DEPARTMENT OF FISHERIES
General Administration Bldg.
Olympia, Washington 98504
(206) 753-6650

[10] LAST NAME	[18] CONTACT PHONE(S)	[1] CONTROL NUMBER
Simpson Tacoma Kraft Company	596-0257	93-S1466-02
[12] WATER: Middle Waterway		[9] WRIA: 10.MARI

6. Excavated materials containing silt, clay, or other fine-grained soil shall not be stockpiled below the ordinary high water mark, except as may be necessary to construct the vegetative bench (approximately .23 acres).

7. All manmade debris on the beach at the project site shall be removed and disposed of upland such that it does not enter waters of the state.

8. Project activities shall be conducted to minimize siltation of beach areas and bed materials.

9. If a fish kill occurs or fish are observed in distress, the project activity shall immediately cease and WDFW Habitat Program shall be notified immediately.

10. Debris or deleterious material resulting from construction shall be removed from the beach area and project site and shall not be allowed to enter waters of the state.

11. Water quality is not to be degraded to the detriment of fish life as a result of this project.

If you have any questions or need additional information, please contact Randy Carman, Regional Habitat Manager, at (206) 902-2573.

LOCATION: Head of Middle Waterway, near the intersection of 11th Street and Middle Waterway Street, Tacoma.

lt:50:07

cc: Tom Luster, Ecology
Nick Lockett, WDFW Patrol

CENPS-OP-RG (1145) 27 July 1994
Morris/x6909

MEMORANDUM FOR Commander

SUBJECT: Department of the Army Permit Evaluation and Decision Document

1. Name: Simpson Tacoma Kraft Co. Reference: 93-2-01466

[ ] Permit issuance, no objections.

[X] Issuance, no objections, special conditions.

[ ] Issuance, other objections.

[ ] Issuance, special conditions.

[ ] Agency objections to original proposal.

2. District Engineer sign Permit Evaluation and Decision Document.

Knaub (E.A.) [signature] 8/1/94
Uhrich [signature] 8/1/94
Ch, Reg Br [signature] 8/3/94
Counsel _____
Ch, Opns Div _____
DD _____
DE _____

Encl
CENPS-DE 1st End
Commander
For Ch, Reg Br
Signed forms returned herewith.

DEPARTMENT OF THE ARMY PERMIT EVALUATION AND DECISION DOCUMENT

Reference: Simpson Tacoma Kraft Company - 93-2-01466

Concerning evaluation of a Department of the Army permit under Section 10 of the Rivers and Harbors Act of March 3, 1899, and Section 404 of the Clean Water Act.

1. Introduction. This permit decision document constitutes the State of Findings, the Finding of No Significant Impact (FONSI), the Environmental Assessment, and the Section 404(b)(1) Evaluation for the work described in the enclosed public notice.

My decision is to issue the permit with special conditions. These special conditions are discussed in paragraph 8.

2. Description of the Proposed Work. The work is to modify approximately 3.3 acres of degraded, natural tideflats and created uplands to support, compliment, and preserve the integrity of the existing mudflats at the head of the Middle Waterway, Commencement Bay at Tacoma, Pierce County, Washington. Primary actions at the project site will include: excavating a total of approximately 7,900 cubic yards of material in uplands and wetlands to create tidal channels and wetlands similar to those existing in a natural estuary. This includes dredging approximately 500 cubic yards of material in an existing intertidal wetland area on the project site to about +8 to +9 MLLW; overdredging 160 cubic yards of contaminated material in the existing mudflat area and backfilling this with clean material; discharging about 534 cubic yards of the dredged material onto the existing mudflat on the site to construct an approximately 0.23 of an acre vegetated bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries. In addition, upland areas will be contoured in an attempt to restore a natural shoreline; metal debris found on the site will be placed three feet below the surface, covered with a plastic liner or one foot clay layer, and covered by at least two feet of clean on-site fill as part of the berm construction; and appropriate natural vegetation will be planted at the new elevations to produce new upper intertidal marsh areas and an adjoining riparian buffer. Excess excavated or dredged material will be removed from the site and deposited, graded and leveled on the upland portion of the Simpson property. This work is not associated with any development project.

3. Need and Purpose. The purpose of the proposed project is to improve water quality and habitat in Commencement Bay and to implement a restoration project under the St. Paul Waterway Natural Resource Damage settlement agreement entered into by Simpson Tacoma Kraft Company (Simpson), Champion International Corporation (Champion), the Washington Department of Natural Resources (WDNR), and the Natural Resource Trustees for Commencement Bay (the Trustees).

4. Alternatives. The proposed project site consists of a natural mudflat and created uplands that are currently being used for log storage. The mudflats appear to be part of the original historic Commencement Bay tidal mudflats. Historic charts and characteristics of the mudflats suggest that this area has never been dredged or filled at any time in the past. A set of preliminary restoration criteria was applied to ten potential sites and projects. This site was chosen because of its likely value for the Commencement Bay area, and the high probability of success. This project could demonstrate how similar projects could help re-establish natural features to restored shorelines and transition

areas in Commencement Bay, could be achieved with the available funds, had minimal contamination issues that could jeopardize the long-term viability of the project, and could occur completely on land that the owner was willing to place a deed restriction on to make the land available to the restoration project in perpetuity. The Trustees, Simpson and Champion identified no other location in Commencement Bay that would meet the main project objective of increasing valuable estuarine habitat within Commencement Bay in perpetuity at a location functionally related to the previously constructed Kraft Mill habitat, the Puyallup delta, and other nearby intertidal and shallow subtidal habitat, that would result in less impact to the aquatic ecosystem.

The proposed restoration project will not result in changes in the water circulation patterns which would permanently flood or dewater the mudflat. Periodic inundation will not be disrupted, but, rather, enhanced. This is expected to positively affect the chemical and biological exchange and decomposition process occurring on the mudflat. The proposed restoration activities are intended to increase the mudflat biota, foraging area, and nursery area of the original mudflat by increasing its size and providing more natural upland habitat for fish and wildlife species. The storm surge runoff capacity of the mudflat is expected to be enhanced by the proposed project.

5. Coordination. The work was coordinated with the general public and the appropriate local, state, and Federal agencies in accordance with procedures specified in 33 CFR, Parts 320-330. The following points are considered pertinent in evaluating comments received in response to the proposal's public notice dated 23 May 1994.

a. Federal Agencies. The Environmental Protection Agency (EPA) has no objection to the proposed work. The National Marine Fisheries Service (NMFS) has no objection to the proposed work. The U.S. Fish and Wildlife Service (USFWS) has no objection to the proposed work. The National Oceanic and Atmospheric Administration (NOAA) has no objection to the proposed work. Representatives from NOAA and USFWS have played an active role in the planning and design of the restoration project and are participants in the Natural Resource Trustees for Commencement Bay.

b. State and Local Agencies. The State of Washington, and the City of Tacoma, the local governing body, have no objections to the work. Comments of these agencies are predicated upon the applicant's compliance with the State Shoreline Management Act and other applicable local laws, regulations, and codes governing this work. The City of Tacoma issued a Shorelines Substantial Development permit for the work. The State of Washington has issued a Water Quality Certification (WQC) for the project and does not object to the issuance of the permit provided the WQC is included as a condition of the permit. The Washington Department of Ecology (WDOE) has participated in the planning and design of the restoration project as members of the Natural Resource Trustees for Commencement Bay.

c. Individual or Organized Groups. The Citizens for a Healthy Bay (CHB) have no objection to the proposed work. The Commencement Bay Cleanup Action Committee (CBCAC) has no objection to the proposed work.

d. Treaty Indians. No comments were received from any Indians or from any Treaty Indian Tribes. The Muckleshoot Indian Tribe and the Puyallup Tribe of Indians are participants in the Natural Resource Trustees from Commencement Bay.

In the mid-1800's, the United States entered into treaties with a number of Indian tribes in Washington. These treaties guaranteed the signatory tribes the right to "take fish at usual and accustomed grounds and stations...in common with all citizens of the territory". Over the years, the courts have held that this right comprehends certain subsidiary rights, such as access to their "usual and accustomed" fishing grounds, and the right to take up to 50 percent of the harvestable anadromous fish runs passing through those grounds, as needed to provide them with a moderate standard of living. In U.S. v. Washington 759 F2d 1353 (9th Cir 1985) the court indicated that the obligation to prevent degradation of the fish habitat would be determined on a case-by-case basis.

The work proposed in this application has been analyzed with respect to its effects on the rights described above, and my conclusions are that (1) the work will not interfere with access to usual and accustomed fishing grounds or with fishing activities; (2) the work will not cause the degradation of anadromous fish runs and habitat; and (3) the work will not impair the tribes' ability to meet moderate living needs.

6. Impact Evaluation.

a. Affected Environment. The proposed restoration project site is located along the southeastern shore of the Middle Waterway in Commencement Bay, adjacent to a relict mudflat owned predominantly by the State of Washington. The project site contains existing mudflats and uplands that are, and have been, used for lumber and log storage. The upland portions of the project site were likely originally filled with sand from dredging of the Puyallup River delta. Simpson owns the project site and leases the upland portions of the site to Paxport Mills.

Past sampling of the project site reveal no current soil or groundwater contamination problems. Brass foundry metal debris is scattered through an upland portion of the project site at the head of Middle Waterway. Testing of the brass foundry metal debris under the Toxicity Characteristic Leaching Procedure (TCLP) has shown the metals in the debris to be considerably below state dangerous waste (DW) and extremely hazardous waste (EHW) levels.

A PSDDA sediment characterization study of the project site, conducted in February 1994, indicates that sediments on portions of the project site are slightly in excess of Washington State Sediment Quality Standards (SQS). Surface sediments at the head of Middle Waterway exceed the state SQS for mercury. Subsurface sediments elsewhere on the project site exceed the state SQS for copper.

Upland portions of the project site are largely devoid of vegetation and covered with wood debris. Plant communities found were typical of disturbed areas in Puget Sound. Upland areas included blackberry thickets (*Rubus* spp.) with several other species of shrubs and small trees including big leaf maple (*Acer macrophyllum*), red osier dogwood (*Cornus stolonifera*), and black cottonwood (*Populus trichocarpa*). Intertidal areas are dominated by a few plant species including salt grass (*Distichlis spicata*) and pickleweed (*Salicornia virginica*), and various filamentous green algae in lower intertidal areas.

The vegetation on the project site provides limited habitat. Wildlife includes several passerine birds and several types of waterfowl common to Commencement

Bay. Mammals utilizing the site may include raccoons, river otters, opossum, and introduced rodents.

There are no properties in the area that are listed or determined to be eligible for listing on the National Register of Historic Places. There are also no threatened or endangered species in the project area.

b. Impacts to Water Quality. A water quality certification for the project was issued by the Washington Department of Ecology on 21 June 1994. It contains several conditions designed to protect water quality and is contingent upon compliance with the final monitoring and adaptive management plan for the proposal. The Water Quality Certification is included as a special condition to the permit. The monitoring and adaptive management plan is a part of the cooperative agreement between Simpson and the Trustees and is also included as a condition to the Department of Army permit to ensure compliance with Section 404 of the Clean Water Act.

The project will generally have a net positive or neutral effect on water quality. Containing the brass foundry metal debris, which exceeds sediment cleanup objectives (SCO) for arsenic, copper, lead, nickel, and zinc, at the east bank of the head of the waterway, will improve water quality in this area by eliminating a potential source of contamination. Excavating the existing surface sediments in the area of the tidal channels, on the other hand, could have a minor adverse effect on water quality because of the exposure of surface sediments containing copper at levels slightly above the SQS.

The project is not expected to have an impact on current patterns and water circulation and fluctuation in the overall project area. The project also will not impact salinity gradients in the overall project area.

Minor erosion and turbidity could occur during excavation of the tidal channels, construction of the vegetative bench, and resloping of the head of the waterway. General methods to control erosion and turbidity during project construction will include the placement of: (a) erosion control procedures to contain the excavation sediments, such as the placing of a silt fence in the waterway; and (b) straw mulch on exposed slopes. If necessary, work conducted below the mean higher high water (MHHW) line will also be limited to the six hours of low tide to minimize sediment discharge into the waterway.

c. Impacts to the Aquatic Ecosystem. The project is designed to enhance aquatic habitat through the restoration of estuarine intertidal and saltmarsh habitats. The project will increase the acreage of wetland and mudflat habitats on the project site. Currently, the project site only contains a very narrow fringing saltmarsh waterward of the MHHW line (there are no freshwater wetlands on the project site). A small portion of the existing mudflat habitat on the project site (0.23 acres) will be filled to create wetland habitat. Additional mudflat habitat will be restored resulting in a slight net increase of mudflat habitat (0.30 acres) on the site.

If successful, the project will provide a more complex component of the mudflat/wetland ecosystem than currently exists in Middle Waterway or Commencement Bay. Only an estimated 57 acres (or 1%) of emergent marsh habitat remains in Commencement Bay of the estimated 3,814 acres of emergent marsh habitat that once occurred in a wide band between the MHHW level and the present location of Interstate 5. Much of this remaining emergent marsh habitat is probably not original habitat.

The project is expected to enhance the aquatic food web over existing conditions at the site. New wetland habitat at the site may contribute to food chain production, fish and wildlife habitat, hydrologic support, shoreline protection, storm and floodwater storage, groundwater recharge, and water purification. New riparian habitat at the site may provide nesting, roosting, feeding, and cover for mammals, reptiles, waterfowl and songbirds. It will also stabilize the bank of the waterway with roots, and filter out nutrient runoff from uplands.

The tideflat's habitat value may also increase because of the food source provided by the newly established riparian vegetation combined with the protection provided by this buffer strip. Thus, the habitat may become more valuable to both aquatic organisms such as young marine fish and salmonids, as well as to the shorebirds and otter that presently use the Middle Waterway tideflat. Intertidal flats contribute nesting, nursery, and feeding habitat for invertebrates and fish; feeding and resting habitat for birds and mammals; nutrient cycling; shoreline protection from erosion; and dissipation of storm surge runoff (40 CFR § 230.42).

No long-term cumulative or secondary adverse impacts are anticipated to the aquatic ecosystem in either the project area or in Commencement Bay as a whole as a result of the project. The project is expected to have long-term positive secondary and cumulative impacts on the aquatic ecosystem of the Middle Waterway area and in Commencement Bay.

d. Impacts to Wildlife. No adverse impacts are expected to occur to wildlife as a result of the project. No federally listed threatened or endangered species will be impacted by the proposal.

The proposed habitat restoration project is expected to have a long-term positive impact on bird use in the project area as a result of changes in both the quality and quantity of habitat available. The new intertidal habitat will provide elevations suitable for shorebirds and the clean, new substrate will support benthic and epibenthic animals that shorebirds feed upon.

e. Impacts to Human Use. The project is expected to have a positive impact on recreational and commercial fisheries in the Puyallup River/Commencement Bay areas by provision of habitat that may be used by young marine fish and salmonids. Indian commercial and recreation fisheries and non-Indian recreational fisheries exist in Commencement Bay, primarily for several salmon species. The various dredge and disposal activities associated with the proposal will occur outside the major fishing periods and outside the fisheries closure period (15 March to 15 June) and will not adversely impact the fisheries. Other than positive impacts on fisheries, no other water-related recreation will be impacted by the project.

The current use of the site and adjacent properties is industrial urban shoreline. The proposal is compatible with surrounding land uses and is consistent with existing zoning, shoreline, land use plans, and policies. There are no known landmarks or evidence of historic, archaeological, scientific or cultural importance on or next to the site.

The project will take two to three months to construct. Views during construction will be of dredging and grading activities, not atypical of the Commencement Bay industrialized area. Other than short-term emissions to the air during construction and perhaps hydrogen sulfide during dredging, no impacts to air quality will occur due to project implementation. The proposed project will

not significantly affect energy use. No long-term noise impacts will be created by the project. The project will not impact public utilities or services.

Views in the immediate vicinity of the project site will be improved by the project. The project will restore the natural shoreline and create a natural transition from the original mudflat to upland industrial uses. The project will also remove debris from the surface of the site, restore riparian and wetland habitat on-site, and establish a vegetative buffer to screen the estuarine habitat from adjacent human activity.

f. Summary. Both the individual and cumulative impacts of the proposed work have been evaluated by this office. Evaluation considered relevant factors including conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. Possible alternatives to reducing identified adverse impacts have also been considered and incorporated where practicable.

The project helps to implement and is consistent with the restoration goal and principles of the Trustees and the Commencement Bay NRD Restoration Panel (1992-1993) and the U.S. Army Corps of Engineers Cumulative Impact Studies for Commencement Bay. The project also helps to implement and is consistent with the vision, and restoration and land use goals and principles, of the Commencement Bay Cleanup Action Committee (CBCAC), the CBCAC Commencement Bay Watershed Restoration Landscape Concept Plan, and other efforts in Commencement Bay and the Lower Puyallup Watershed.

This evaluation has not identified any potentially significant adverse effects that would accrue from any actions taken under the terms of this permit.

7. Section 404(b)(1) Evaluation. The work was evaluated pursuant to Section 404(b)(1) of the Clean Water Act in accordance with the guidelines promulgated by the Environmental Protection Agency (EPA) (40 CFR 230) for evaluation of the discharge of dredged or fill material into waters of the United States. A total of ten potential restoration sites were identified during the initial review of project implementation. The proposed discharge (with incorporation of the monitoring and adaptive management plan) represent the least environmentally damaging practicable alternative and include all appropriate and practicable measures to minimize adverse effects on the aquatic environment.

The restoration of the existing mudflat will reestablish the historic grade of the tideland, and allow it to function in a more natural way. The proposed restoration activities will reestablish the water circulation patterns, and decrease the possibility of erosion and accretion in this area. The changes in the patterns of inundation also may positively affect the chemical and biological exchange and decomposition processes occurring on the mudflat. This should restore the deposition of suspended material affecting the productivity of the area. The proposed changes may increase mudflat biota, foraging areas, and nursery areas.

Consideration has been given to the need for the work, and to such water quality standards as are appropriate and applicable by law. The work will not result in the unacceptable degradation of the aquatic environment.

8. Determinations. I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning this permit application, as well as the stated views of other interested Federal and non-Federal agencies and the concerned public, relative to the work in waters of the United States.

I have made the following determinations:

a. Special Conditions.

1. The permittee must provide a copy of the permit transmittal letter, the permit form, and drawings to all contractors performing any of the authorized work.

2. The permittee must comply with the provisions of the attached Water Quality Certification.

3. A restoration monitoring report, as described in the Middle Waterway Shore Restoration Project Monitoring and Adaptive Management Plan, dated April 1994, or status report, if construction of project has not started, will be submitted to the District Engineer 13 months after the date of permit issuance. In addition, restoration monitoring reports will be submitted to the District Engineer 12 months from the date of the first monitoring report, or status report, if construction has not started, on an annual basis for the next consecutive five year period.

4. This permit does not exclude the permittee from liability under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended (42 U.S.C. 9601 et.seq.) of the 1989 Washington State Model Toxic Control Act (R.C.W. 70.105), nor does the permit waive any liability for response costs, damages, and any other cost that may be assessed under CERCLA. Additionally, the permittee will be financially responsible for any logistic problems associated with the construction and operation of this project and potential cleanup operation in this portion of Commencement Bay.

b. Finding Of No Significant Impact. Performance of this work in accordance with the standard and special conditions of the permit, will not significantly affect the quality of the human environment. Further, I have determined that the issuance of this particular permit is a Federal action not having a significant impact on the environment. I have thus concluded that the preparation of a formal Environmental Impact Statement is not required.

c. Section 404(b)(1) Evaluation. The discharges and methods specified in the proposed work are in accordance with the Section 404(b)(1) guidelines.

d. Public Interest. The proposed work is considered to be not contrary to the general public interest. The project will result in positive impacts on the aquatic environment on the project site, including removal of a potential source of contaminants to the aquatic environment, generally cleaner substrate conditions than presently exist, and an increase in estuarine habitat valuable to bird and aquatic life and screened from adjacent industrial uses. The only adverse impacts to the aquatic ecosystem associated with the project are minor erosion and turbidity impacts occurring during project construction.

9. Findings. The work complies with state and local laws and is consonant with National policy, statutes, and administrative directives. I find that issuance of a Department of the Army permit with special conditions for this work is based upon a thorough analysis of the various evaluation factors and determinations that have been identified herein.

8/3/94
Date

for Donald T. Wynn
Colonel, Corps of Engineers
District Engineer

Tacoma City of Tacoma
Public Works Department

OCT 11 1993

TO: All Departments and Agencies With Jurisdiction

FROM: Kathlyn C. Henderson, Environmental Officer
Building and Land Use Services Division
Public Works Department

SUBJECT: Environmental Checklist
Determination of Nonsignificance (DNS)

DATE: October 7, 1993

In accordance with WAC 197-11-340, transmitted herewith are copies of the Environmental Checklist and DNS for the following project:

APPLICANT: Simpson Tacoma Kraft Company
PO BOX 2133
Tacoma, WA 98401

PROPOSAL: A "restoration" project to construct substantial new riparian and wetland habitat and improve existing intertidal habitat on a 7.9 acre site. Primary actions will be to excavate and contour upland portion to restore a natural shoreline, vegetation plantings, debris removal or containment, and modification of approximately 3.3 acres of existing tidelands through excavation to intertidal elevations and filling to create a vegetative bench and create screening to support, complement and preserve existing tideflats. This action is not associated with any development project. Site is located on the southeastern shore of Middle Waterway adjacent to East 11th Street and Middle Waterway Road.

Please review this Checklist and make any comments on this proposal no later than October 22, 1993. The Puyallup Tribe is hereby notified that this information is being provided per the consultation process addressed by the 1988 Puyallup Tribal Agreement.

Submit comments to: Kathlyn C. Henderson
Environmental Officer
City of Tacoma
747 Market Street, Suite 345
Tacoma, WA 98402

KATHLYN C. HENDERSON
Environmental Officer
KCH:PK:chcENV93161

File: Environmental Commission
Building and Land Use Services Division

Environmental Checklist
Simpson Tacoma Kraft Company

cc: Randy Carman Department of Fisheries Habitat Management PO BOX 43155 Olympia, 98504
DNR Division of Aquatic Lands PO BOX 47027 Olympia, 98504-7027
DNR SEPA Center PO BOX 47015 Olympia, 98504-7015
Karen Keely Environmental Protection Agency 1200 Sixth Avenue Seattle, 98101
Jeff Krausmann US Fish & Wildlife Service 3704 Griffin Lane SE #102 Olympia, 98501-2192
Puyallup Indian Tribe Land Use Department Elizabeth Tail 2002 East 28th Street, 98404-1837
Tacoma Pierce County Health Department ATTN: Bob McElroy
US Army Corps of Engineers Permit Section PO BOX C-3755 Seattle, 98134

ok - ku

DETERMINATION OF ENVIRONMENTAL NONSIGNIFICANCE

TO BE FILLED IN BY APPLICANT:

Description of proposal: An environmental restoration project to provide new riparian and wetland habitat and improved intertidal habitat.

Proponent/Applicant: Simpson Tacoma Kraft Company

Contact Person: Dave McEntee Phone: 596-0257

City actions(s) requested: Shoreline permits, grading & filling permit & Environmental review and determination.

Location of proposal, including street address, if any: Southeastern shore of Middle Waterway, adjacent to East 11th Street and Middle Waterway Road.

AGENCY USE ONLY:

Lead Agency: City of Tacoma

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(9c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This section to be used only for DNS's issued under WAC 197-11-340(2). The lead agency will not act on this proposal for 15 days. Comments must be submitted by October 22, 1993 *for agency consideration. No permits may be issued, and the applicant shall not begin work until the comment period has expired and all other necessary permits obtained.*

Responsible Official: William L. Pugh

Position/Title: Public Works Director Phone: 591-5525

Department/Division: Tacoma Public Works Department

Signature: William L. Pugh Date: 10/5/93

SEPA Public Information Center:

(✓) Approved at to form by:

You may appeal this determination to the SEPA Public Information Center, Tacoma Municipal Building, 3rd Floor, 747 Market Street, Tacoma, Washington 98402, by filing a notice of appeal together with a $200.00 filing fee, no later than 10-22-93.

SEPA PIC Officer: Nellie R. Marciano

SEPA PIC File # 03322-93 Department File # 141.559 Filing Fee $

Account #

141.559

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project, if applicable:

Middle Waterway Shore Restoration Project

2. Name of applicant:

Simpson Tacoma Kraft Company, in cooperation with Champion International Corporation and the Natural Resource Trustees for Commencement Bay (Trustees). The Trustees include the National Oceanographic and Atmospheric Administration (NOAA), the U.S. Fish & Wildlife Service, the Washington Department of Ecology, the Muckleshoot Indian Tribe, and the Puyallup Tribe of Indians.

3. Address and phone number of applicant and contact person:

Simpson Tacoma Kraft Company
801 Portland Avenue
P.O. Box 2133
Tacoma, WA 98401

Telephone: (206) 596-0257

Contact person: Mr. Dave McEntee

4. Date checklist prepared:

September 15, 1993

5. Agency requesting checklist:

City of Tacoma (Lead Agency)/Washington Department of Ecology

6. Proposed timing or schedule (including phasing, if applicable):

Project construction would take two to four months. This time depends on when permits are issued and how the schedule coincides with fisheries restrictions which, among other things, would preclude or restrict work in the water from March 15 through June 15 each year. Assuming approvals are received, the project would start in February 1994 and be completed in May 1994, except for ongoing monitoring and adaptive management measures.

The proposed staging and schedule for the project has been developed with the assistance of the federal, state and tribal natural resource trustees for Commencement Bay, and is currently:

1.	Excavating and grading	Feb. 14, 1994 - March 25, 1994
2.	Planting	April 18, 1994 - April 29, 1994
3.	Monitoring	May 15, 1994 and thereafter

However, because April to June is the optimal time for planting, permitting delays could delay the project by at least one year (until the following construction season) and require revisions in the proposed staging order.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?**

Possibly. Simpson is considering designing and constructing new upland stormwater pollution prevention and treatment facilities for its properties. These facilities could include a component that is separate from but related to the proposed restoration project: the use of treated stormwater from adjacent Simpson upland property to support wetland-estuarine habitat on the project site. While the proposed restoration project and the Simpson stormwater pollution prevention and treatment project could be functionally related, neither project depends on the other for its justification. Even if a biological treatment facility for stormwater was not constructed on adjacent Simpson upland property, and treated stormwater from the facility not used to support wetland-estuarine habitat on the project site, the proposed restoration project would provide important habitat benefits to the Commencement Bay ecosystem.

This proposal will also increase the opportunity and incentive for protection of state-owned portions of the original Middle Waterway tideflats and restoration of other publicly and privately-owned lands along the western and southern shorelines of the Middle Waterway tideflats. In addition, it will provide an opportunity for habitat education in close proximity to the city center of Tacoma.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

A project overview and group of technical appendices has been combined to form one document to address the environmental issues related to the proposal (see Project Analysis, Overview and Appendices I-V). The reports incorporated by reference into this checklist are:

Project Overview, Middle Waterway Shore Restoration Project

I	Middle Waterway Shore Restoration Project; Technical Appendix I: Soil and Sediment Quality
II	Middle Waterway Shore Restoration Project; Technical Appendix II: Biological Conditions
III	Middle Waterway Shore Restoration Project; Technical Appendix III: Physical Elements of Proposed Action
IV	Middle Waterway Shore Restoration Project; Technical Appendix IV: Project Schedule and Public and Agency Involvement
V	Middle Waterway Shore Restoration Project; Technical Appendix V: Shoreline and Coastal Zone Consistency

Additional background information is contained in the Sources of Information noted in the back of the Project Overview, which are also incorporated by reference into this checklist. Appendix IV describes the permit and public participation process, public meetings and hearings that are scheduled, public comment periods and availability of documents.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

No. To our knowledge, no other applications are pending for government approval of other proposals directly affecting the property covered under this approval.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

City of Tacoma: Shoreline permit, Excavation and Grading permit.

Washington Department of Ecology: Water quality certification, short-term water quality exemption (for excavation to intertidal elevations), and coastal zone management certification.

U.S. Army Corps of Engineers: Section X and 404(b) permits.

Washington Department of Fisheries and Wildlife: Hydraulic approval permit.

Commencement Bay Natural Resource Trustees: Restoration project implementation approval.

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of you proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

The purpose of the project is to improve water quality and habitat in Commencement Bay and to implement an additional restoration project under the St. Paul Waterway Natural Resource Damage settlement agreement entered into by Simpson Tacoma Kraft Company, Champion International Corporation, and the Natural Resource Trustees for Commencement Bay. The project has the twin goals of providing study value as well as long term environmental restoration.

The proposed project is an environmental improvement or "restoration" project; it is not being implemented as part of a development project. The proposed project will construct substantial new riparian and wetland habitat and improve and protect existing intertidal habitat for bird and marine life to enhance Commencement Bay aquatic resources. By its nature, the proposed project is water-dependent. It also is designed to compliment possible new upland stormwater pollution prevention and treatment facilities being considered for adjacent industrial property and water-dependent maritime and harbor uses.

The primary actions at the project site will be to excavate and contour the upland portion of the site to restore a natural shoreline, and to plant appropriate natural vegetation at the new elevations. Approximately 3.3 acres of the approximately 7.9 acre project site will be modified to support, complement, and preserve the integrity of the existing tideflats. Two separate sections of the upland portion of the site will be excavated to intertidal elevations to form tidal channels similar to those existing in a natural estuary. About one-fourth of an acre of the existing mudflat portion of the site will be filled to construct a vegetative bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries. Material removed from the construction of the intertidal area will be used to increase elevation along the developed side of the project site to provide riparian habitat and a vegetative buffer to screen the wetland-estuarine habitat from adjacent human activity. Any excavated material not used on-site will be removed from the site for use for grading and leveling non-wetland areas on adjacent Simpson property.

Other environmental improvements will include the removal of debris from a portion of the existing intertidal area and the removal off-site or containment on-site of brass foundry metal debris found in the east bank of the head of the Waterway.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The proposed restoration project site is an approximately 7.9 acre property located along the southeastern shore of the Middle Waterway in Commencement Bay. The property lies between the St. Paul Waterway, to the east, and the Thea Foss Waterway, to the west, within the city limits of Tacoma, Washington. The project boundary contains existing tideflats and uplands. See Project Overview and Appendices III and V.

The legal description for the project site is:

A parcel of land situated in the Northeast quarter of Section 4, Township 20 North, Range 3 East and the South half of Section 33, Township 21 North, Range 3 East of the W.M., City of Tacoma, County of Pierce, State of Washington, bounded and described as follows:

Commencing at the intersection of the centerline of East 11th Street (formerly South 11th Street) and St. Paul Avenue; thence North 48°14' East, along the centerline of said East 11th Street, a distance of 599.09 feet; thence North 28°59' West, a distance of 51.27 feet, more or less, to the true point of beginning, said point also being on the Northwesterly line of said East 11th Street; thence North 28°59' West, a distance of 30.76 feet; thence South 48°14' West, a distance of 215.37 feet, more or less, to a point on the Easterly line of an unnamed street; thence along the Easterly line of said unnamed street North 23°52'12" West, a distance of 105.09 feet to a point on the Southeasterly line of Middle Waterway; thence along said Southeasterly line North 48°14' East, a distance of 63.06 feet, more or less, to the most Easterly corner of Middle Waterway; thence along the Northeasterly line of Middle Waterway, North 23°52'02" West, a distance of 1075.00 feet, thence North 81° 46'01" East, a distance of 264.21 feet, more or less, to the Northwesterly boundary of that certain parcel of land heretofore conveyed from Union Pacific Railroad Company to St. Regis Paper Company by Warranty Deed dated April 10, 1970, U.P.R.R. Co. Deed Audit No. L-712; thence along the Southwesterly line of said deeded parcel, South 23°54'00" East, 1020.00 feet thence continuing along the Southwesterly boundary of said deeded parcel, South 45°18'41" East, a distance of 38.35 feet to a point on the Northwesterly line of East 11th Street; thence along said Northwesterly line, South 48°14" West, a distance of 128.16 feet, more or less, to the true point of beginning.

TO BE COMPLETED BY APPLICANT

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. **General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.**

Flat, filled tidelands and adjacent tidelands. Elevations within the project site range from +6 to +20 MLLW.

b. **What is the steepest slope on the site (approximate percent slope)?**

The steepest existing slope on the site is the bank of the Middle Waterway, which has an approximate slope ratio of 1:1. The proposed project will generally reduce this slope to approximately 1:1½.

c. **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

The soil in the upland portion of the site consists of sand and gravel fill with occasional wood chips, underlain by fluvial marine deposit (silt and sand). The uplands have apparently been constructed with sediments (primarily sand) dredged from the Puyallup River at sometime during the past 30 to 50 years. Soils in the tidal portion of the project consist of sandy silt.

d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

No, there are no surface indications or history of unstable soils in the immediate vicinity.

e. **Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

Two separate sections of the upland portion of the site will be excavated down to about +8 to +9 MLLW in order to form tidal channels similar to those existing in a natural estuary. Material removed from the construction of the intertidal area (approximately 8480 cubic yards) will be used to: (1) fill about .23 acres of existing mudflat to construct a vegetative bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries (approximately 534 cubic yards); and (2) increase elevation along the developed side of the project site to provide riparian habitat and a vegetative buffer to screen the wetland-estuarine habitat from adjacent human activity. Any excavated material not used

on-site will be removed from the site for use for grading and leveling non-wetland areas on adjacent Simpson property (approximately 7950 cubic yards).

f. **Could erosion occur as a result of clearing, construction , or use? If so, generally describe.**

Minor erosion could occur during construction and before the vegetative plantings are permanently established.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

No percentage of the site will be covered with an impervious surface after project construction.

h. **Proposed measures to reduce or control erosion, or other impacts to the earth if any:**

A grading and erosion control plan will accompany the application for an excavation and grading permit. Site contours on the restoration site will be constructed to provide stable slopes to prevent erosion. Openings to the two separate marsh areas will be broad to prevent erosion.

During construction, standard erosion control practices, including silt fences and/or hay bales will be used to minimize temporary, construction related erosion. These procedures will be identified on the final grading and erosion control plan for the site that will accompany the application for the excavation and grading permits, and will be subject to hydraulic project approval.

2. **Air**

a. **What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

Emissions to the air during construction would include exhaust from construction machinery and possibly dust from excavating if performed in dry weather. No additional emissions over existing conditions will occur after project is completed.

b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

No.

c. **Proposed measure to reduce or control emissions or other impacts to air, if any:**

Not applicable.

3. **Water**

a. **Surface**

1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, pond, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

The project site is on the southeastern shore of the Middle Waterway, which extends south from Commencement Bay.

2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Yes. The primary actions at the project site will be to excavate and contour the upland portion of the site to restore a natural shoreline, and to plant appropriate natural vegetation at the new elevations. Virtually the entire proposal therefore includes work over, in, or adjacent to the described waters. The project is described at greater length in the Project Overview and in Appendix III, and the plans are reproduced in the figures to those sections.

3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

Approximately 580 cubic yards of dredged material will be excavated from the project site. Approximately 534 yards of fill material, excavated from the new intertidal areas on the project site, will be placed in about .23 acres of existing mudflat to raise the intertidal elevation one to two feet to the appropriate elevation for sedge or other wetland plants. The objective would be to construct a vegetative bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries.

4) **Will the proposal require surface water withdrawals or diversions: Give general description, purpose, and approximate quantities if known.**

As indicated above, the proposed project will allow surface tidal water to flow into the excavated areas of the project in order to form tidal channels similar to those existing in a natural estuary. Quantities of tidal water that will flow into these areas will depend upon the height of the tide.

5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

No.

6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

Minor soil erosion could occur during construction and before the vegetative plantings are permanently established.

b. **Ground:**

1) **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

No.

2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the systems are expected to serve.**

None. No waste material will be discharged into the ground from septic tanks or other sources.

c. **Water Runoff (including stormwater):**

1) **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The completed project will have no impervious surfaces, and will create no new runoff. New wetland habitat created by the project will contribute to storm and floodwater storage, groundwater recharge, and water purification.

The wetland habitat will be designed to complement possible new upland stormwater pollution prevention and treatment facilities being considered for Simpson property immediately north of the site. These facilities could include a component that is separate from but related to the proposed restoration project: the use of treated stormwater from adjacent Simpson upland property to support wetland-estuarine habitat on the project site. While the proposed restoration project and the Simpson stormwater pollution prevention and treatment project could be functionally related, neither project depends on the other for its justification. Even if a biological treatment facility for stormwater was not

constructed on adjacent Simpson upland property, and treated stormwater from the facility not used to support wetland-estuarine habitat on the project site, the proposed restoration project would provide important habitat benefits to the Commencement Bay ecosystem.

2) **Could waste materials enter ground or surface waters? If so, generally describe.**

Minor soil erosion could occur during construction and before the vegetative plantings are permanently established.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts.

See B.1.h above.

4. Plants

a. Check or circle types of vegetation found on the site:

X deciduous tree: alder, maple, aspen, other
_____ evergreen tree: fir, cedar, pine, other
_____ shrubs
_____ grass
_____ pasture
_____ crop or grain
_____ wet soil plants: cattail, buttercup, bulrush, skunk, cabbage, other
X water plants: water lily, eelgrass, milfoil, other
X other types of vegetation

Plants found on the site include: pickleweed, saltgrass, Pacific madrona, elm, big-leaf maple, and blackberry.

b. What kind and amount of vegetation will be removed or altered?

Some amount of the species of vegetation listed in 4.a. may be altered or removed to allow excavation of upland soils to create tidal channels. However, of the existing species, the project proposes to increase the net coverage of pickleweed and salt grass, and add additional species native to the estuarine environment (see 4.d.).

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The proposed project is an environmental improvement or "restoration" project. To ensure establishment of new intertidal marsh and buffer vegetation on the site, much of the newly graded area will be planted with native saltmarsh and upland vegetation. The following table lists plant species to be retained on site, and species to be added, and species which which are expected to rapidly colonize newly disturbed areas. Existing vegetation of habitat value includes pickleweed, saltgrass, Pacific madrona, elm, big leaf maple, and native blackberry. Proposed plant species listed below include native wetland plant species with high wildlife value, as well as upland species. Upland species, such as hemlock, red cedar and red alder, will be planted along the berm hummock and in other buffer areas to provide bird habitat and to screen the wetland area from adjacent human activity.

Existing and proposed plant species, and associated habitat function for the Middle Waterway Restoration Site.

Plant Species	Approximate Elevation	Habitat Function
Existing		
*Quilwort *Eleocharis parvula*	9.0-10.5	Food for invertebrates and Canada geese
*Pickleweed *Salicornia virginica*	9.5-12.0	Habitat for invertebrates; detrital production
*Saltgrass *Distichlis spicata*	11.5-12.0	Habitat for invertebrates; detrital production; seed production for waterbirds
Pacific Madrona *Arbutus menziesii*	upland	Cover, nesting sites, fruit and insect forage for songbirds
Elm *Ulmus*,sp.	upland	Cover, nesting sites and insect forage for songbirds
Big-leaf maple *Acer macrophyllum*	upland	Cover, nesting sites and insect forage for songbirds
Himalayan Blackberry *Rubus Discolor*	upland	Cover and fruit production for songbirds; screening from human disturbance
Pacific Blackberry *Rubus ursinus*	upland	Cover and fruit production for songbirds; screening from human disturbance

Proposed

*Quilwort *Eleocharis parvula*	9.0-10.5	Food for invertebrates and Canada geese
*Pickleweed *Salicornia virginica*	9.5-12.0	Habitat for invertebrates; detrital production
*Saltgrass *Distichlis spicata*	11.5-12.0	Habitat for invertebrates; detrital production; seed production for waterbirds
Lyngby's sedge *Carex Lyngbyei*	10.5-12.0	Habitat for invertebrates; detrital production, seed production for waterbirds
American Threesquare *Scirpus americanus*	12.0-13.0	Habitat for invertebrates; detrital production, seed production for waterbirds
Tufted hairgrass *Deschampsia caespitosa*	12.5-13.5	Habitat for invertebrates; detrital production, seed production for waterbirds
Seaside arrowgrass *Triglochin maritimum*	9.5-11.5	Habitat for invertebrates; detrital production; seed production for waterbirds
Western red cedar *Thua plicata*	upland	Screening from human activities; nesting habitat; insect forage for songbirds
Shore Pine *Pinus contorta*	upland	Screening from human activities; nesting habitat; insect forage for songbirds
Douglas Fir *Pseudotsuga menziesii*	upland	Screening from human activities; nesting habitat; insect forage for songbirds
Vine maple *Acer circinatum*	upland	Screening; nesting/perching for song birds
Oregon crabapple *Pyrus fusca*	upland	Screening; nesting, perching habitat for songbirds; fruit forage
Red elderberry/blue elderberry *Sambucus racemosa/Sambucus cerulea*	upland	Fruit forage for songbirds
Serviceberry *Amalanchier alnifolia*	upland	Screening; nesting, perching habitat for songbirds; fruit forage
Nootka Rose *Rosa nutkana*	upland	Screening; nesting, perching habitat for songbirds; fruit forage
Snowberry *Symphoricarpus albus*	upland	Screening; nesting, perching habitat for songbirds; fruit forage
Oregon Grape *Mahonia nervosa*	upland	Screening; nesting, perching habitat for songbirds; fruit forage

*Increased cover by these species is proposed as colonization of newly-created habitat occurs.

The planting plan for the project site is described at greater length in the Project Overview and in Appendix III, and the plans are reproduced in figures to the sections. A final planting plan will be prepared that will specify detailed planting requirements (number of plants, size, spacing, soil amendments, etc.) as well as specific planting locations for each plant species.

5. **Animals**

a. **Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:**

birds	**hawk, heron, eagle, songbirds, other;**
mammals:	**deer, bear, elk, beaver, other;**
fish:	**bass, salmon, trout, herring, shellfish, other**

birds:	Glacous-winged gull, western grebe, blue heron, double crested cormorant, rock dove, starling, Canada goose, mallard and pintail ducks, widgeon, green-winged teal, greater scaup
mammals:	Norway and black rats, harbor seal, otter
fish:	salmon, trout, herring, flatfish, pollack, cod, rockfish, pile, striped, and shiner perch

b. **List any threatened or endangered species known to be on or near the site.**

No threatened or endangered animal species are known to be on or near the site.

c. **Is the site part of a migration route? If so, explain.**

The nearby Puyallup River is a migratory route for juvenile and adult salmonids. Commencement Bay and the Puyallup River are "usual and accustomed" fishing areas for the Muckleshoot Indian Tribe and the Puyallup Tribe of Indians.

d. **Proposed measures to preserve or enhance wildlife, if any:**

The entire project is designed to restore and enhance wildlife habitat. New wetland habitat at the site will contribute to food chain production and fish habitat. New riparian habitat will provide nesting, roosting, feeding, and cover for mammals, reptiles, waterfowl and song birds. The tideflat's habitat value will increase because of the food source provided by the newly established riparian vegetation combined with the protection provided by this buffer strip. Thus, the habitat will become more valuable to both aquatic organisms such as young marine fish and salmonids, as well as to shorebirds and other

fauna. Intertidal flats contribute nesting, nursery, and feeding habitat for invertebrates and fish; feeding and resting habitat for birds and mammals; and nutrient cycling.

6. **Energy and Natural Resources**

a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

The project would require minor electrical energy after project completion to power monitoring equipment.

b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

No.

c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

The proposed project will not materially affect energy use in any manner.

7. **Environmental Health**

a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

No environmental health hazards are expected as a result of the proposed project. Soil and sediment quality are described at greater length in the Project Overview and in Appendix I.

1) **Describe special emergency services that might be required.**

None.

2) **Proposed measures to reduce or control environmental health hazards, if any:**

The project is designed to reduce environmental hazards. Debris will be removed from a portion of the existing intertidal area and the surface of the tideflat owned by Simpson Tacoma Kraft Company. Brass foundry metal debris found in the east bank of the head of the Waterway will be removed or contained on-site in a manner that will isolate possible contaminants in the metal debris from the environment. These wastes presently exceed SCOs (sediment cleanup objectives) for arsenic, copper, lead, nickel and zinc, with elevated levels of chromium.

Two upper intertidal sediment sites inside the project site boundaries contain exceedences of sediment quality standards. The tidal flow into the newly constructed habitat will sweep across these locations, thereby raising the possibility of contamination of the new habitat with materials from the adjacent undisturbed, but contaminated, habitat. The project will include monitoring to determine whether the newly constructed intertidal habitat becomes contaminated by materials from contaminated sediments in the vicinity of the site and if any adaptive management measures are warranted.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short-term noise will be created during the construction phase of the project. Noise levels will be increased by machinery excavating and contouring the upland portion of the project site. No long-term noise impacts will be created by the project, and noise from adjacent land uses will be somewhat reduced because of the lower elevations and upland vegetated berms.

3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The project site is currently leased by Paxport Mills for lumber and log storage. Surrounding areas are currently used for wood processing.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

No structures exist on the site.

d. Will any existing structures be demolished?

Not applicable.

e. What is the current zoning classification of the site?

M-3, Heavy industrial district
S-10, Port industrial shoreline district

f. What is the current comprehensive plan designation of the site?

High intensity; Port industrial area.

g. If applicable, what is the current shoreline master program designation of the site?

Urban environment
M-3, Heavy industrial district
S-10, Port industrial shoreline district

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No. The project does not include impacts to, or creation of, wetlands regulated under the City of Tacoma Critical Areas Preservation Ordinance, TMC ch. 13.11. The project site only contains existing wetlands waterward of the ordinary high water mark. See TMC § 13.11.130. The wetlands being created by the project do not include those artificial wetlands intentionally created to mitigate conversion of wetlands. See TMC § 13.11.050(52). At the same time, the project is designed to comply with the spirit of this ordinance, and will include a vegetative buffer to screen the wetland-estuarine habitat on-site from adjacent human activity. This buffer zone will extend to the boundary of the project site and the existing Union Pacific Railroad and 11th Avenue right-of-ways.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

The proposal is compatible with surrounding uses and is consistent with existing zoning and shoreline and land use plans and policies. By removing or containing on-site sources of pollution and restoring habitat and natural areas, the proposal would actively further the goals and policies of the Shoreline Management Act, the Tacoma shoreline master program and State of Washington Coastal Zone Management Program, which are also the applicable land use policies for the site (see Appendix V).

9. **Housing**

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

Not applicable.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None.

c. **Proposed measures to reduce or control housing impacts, if any:**

Not applicable.

10. **Aesthetics**

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

No structure will extend more than six feet from existing ground level.

b. **What views in the immediate vicinity would be altered or obstructed?**

Views in the immediate vicinity will be improved by the proposal. The project will restore the natural shoreline and create a natural transition from the original mudflat to upland industrial uses. The project will also remove debris from the surface of the site, restore riparian and wetland habitat on-site, and establish a vegetative buffer to screen the wetland-estuarine habitat from adjacent human activity.

c. **Proposed measures to reduce or control aesthetic impacts, if any:**

None.

11. **Light and Glare**

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

The project will produce no light or glare.

b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

No.

c. **What existing off-site sources of light or glare may affect your proposal?**

None.

d. **Proposed measures to reduce or control light and glare impacts, if any:**

Not applicable.

12. **Recreation**

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

Sport fishing for Chinook salmon and steelhead occurs in Commencement Bay.

b. **Would the proposed project displace any existing recreational uses? If so, describe.**

No.

c. **Proposed measures to reduce or control impacts, if any:**

None. The proposal will enhance the Commencement Bay fishery resource by restoring intertidal habitat, which provides valuable rearing habitat for juvenile salmon and other fish.

13. **Historic and Cultural Preservation**

a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, describe.**

No.

b. **Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

There are no known landmarks or evidence of historic, archaeological, scientific, or cultural importance on or next to the site.

c. **Proposed measures to reduce or control impacts, if any:**

Not applicable.

14. **Transportation**

a. **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Access to the site is provided by Middle Waterway Avenue which runs parallel to the site and meets East 11th Street at the south end of the site. Access to Interstate-5, which runs to the east of the site, is available within 10 blocks of the site.

b. **Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The site is not currently served by public transit.

c. **How many parking spaces would the completed project have? How many would the project eliminate?**

None. The proposal will not create a need for additional parking spaces.

d. **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No. The proposal will not require any new roads or streets, or improvements to existing roads or streets.

e. **Will the project use (or occur in immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The project will not use water, rail, or air transportation. A rail spur to the Paxport Mills property runs parallel to the site and will continue to be used for industrial purposes.

f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

None.

g. **Proposed measures to reduce or control transportation impacts, if any:**

Not applicable.

15. **Public Services**

a. **Would the project result in an increased need for public services (for example; fire protection, police protection, health care, schools, other)? If so, generally describe.**

No.

b. **Proposed measures to reduce or control direct impacts on public services, if any.**

Not applicable.

16. **Utilities**

a. **Circle utilities currently available at the site; electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

None.

b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

The completed project will not require any utility use.

C. **Signature**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

David McEntee, Simpson Tacoma Kraft Company

Date Submitted: 9/21/93

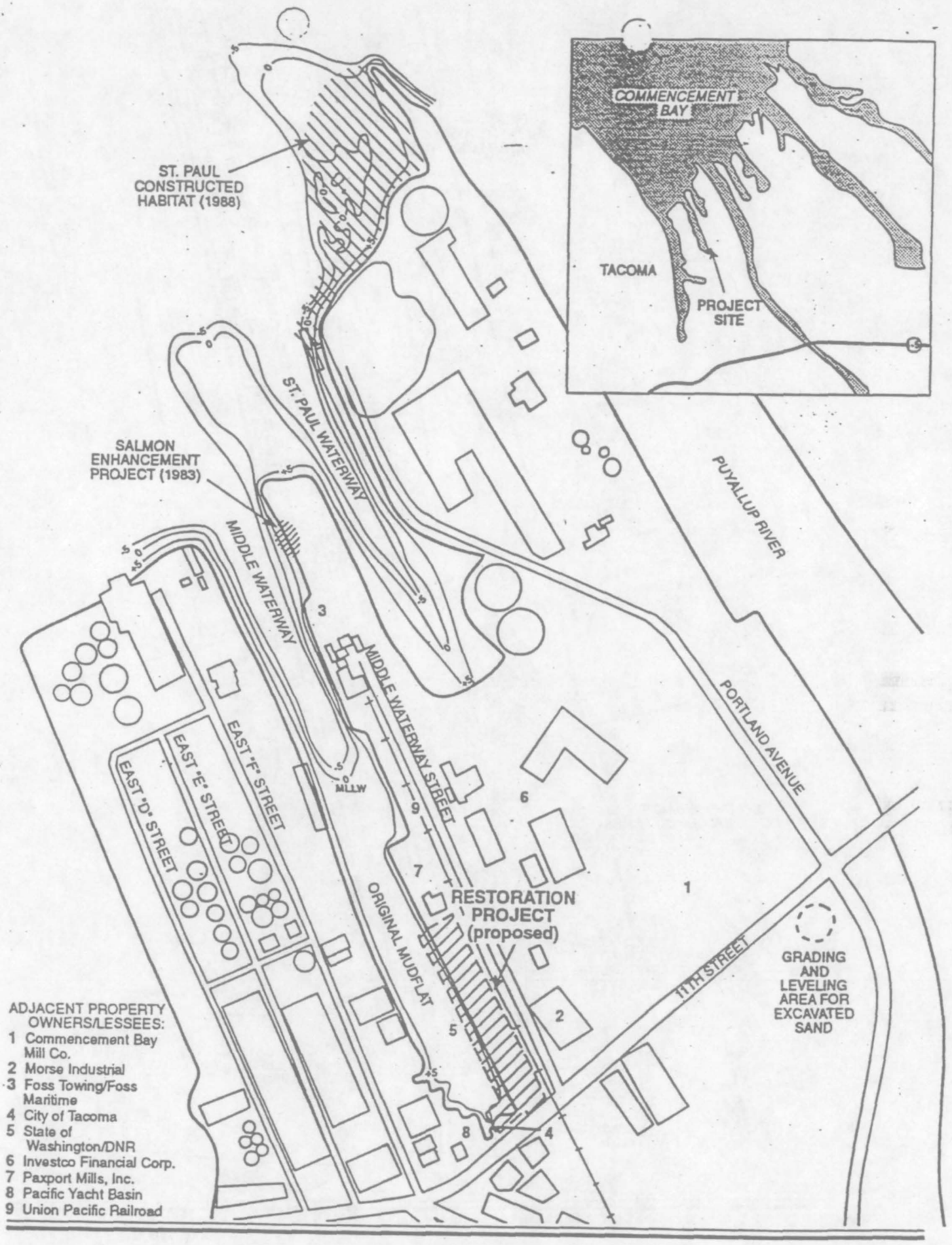


Figure 1.
Vicinity Map,
Middle Waterway Shore Restoration,

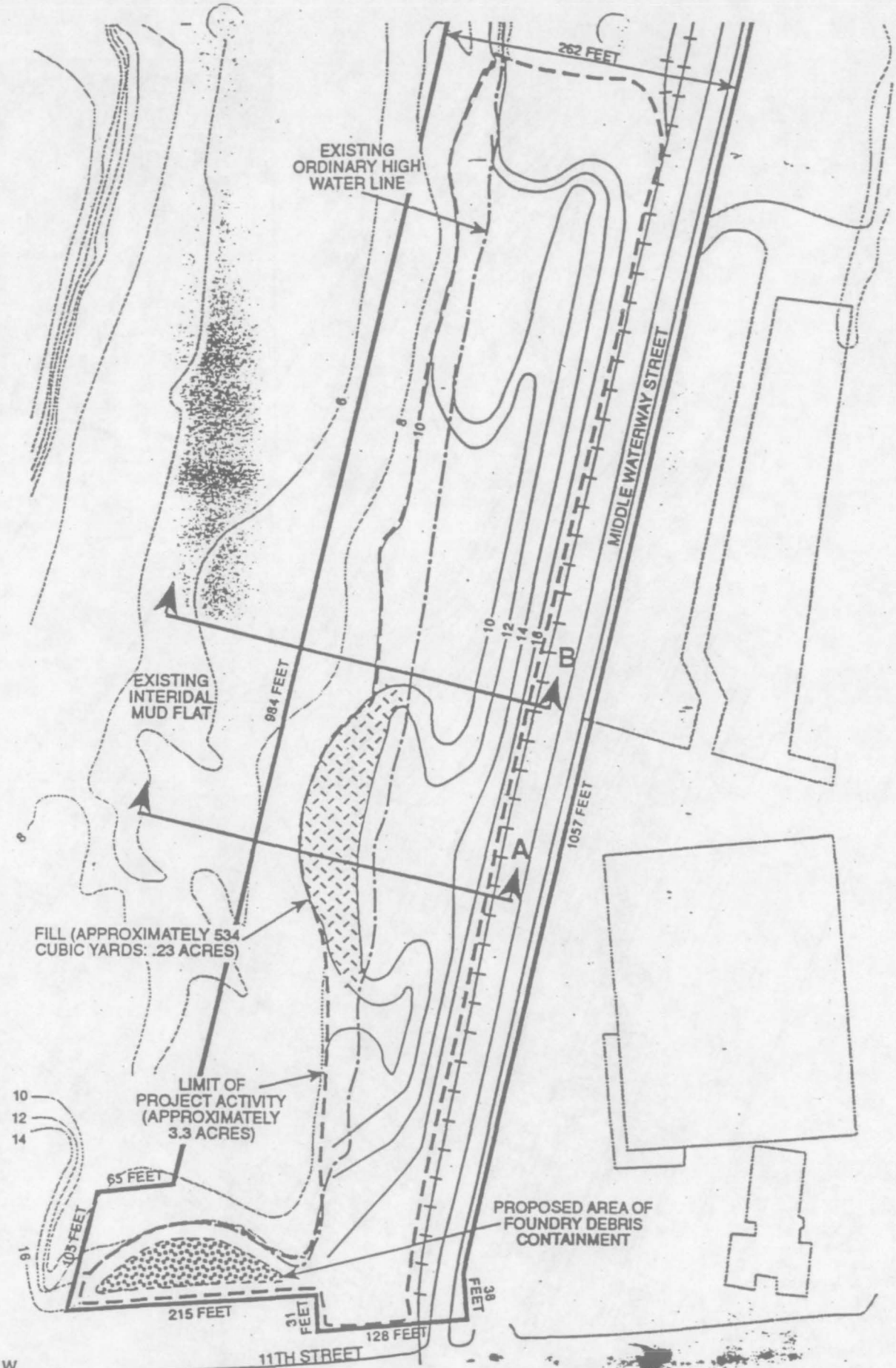
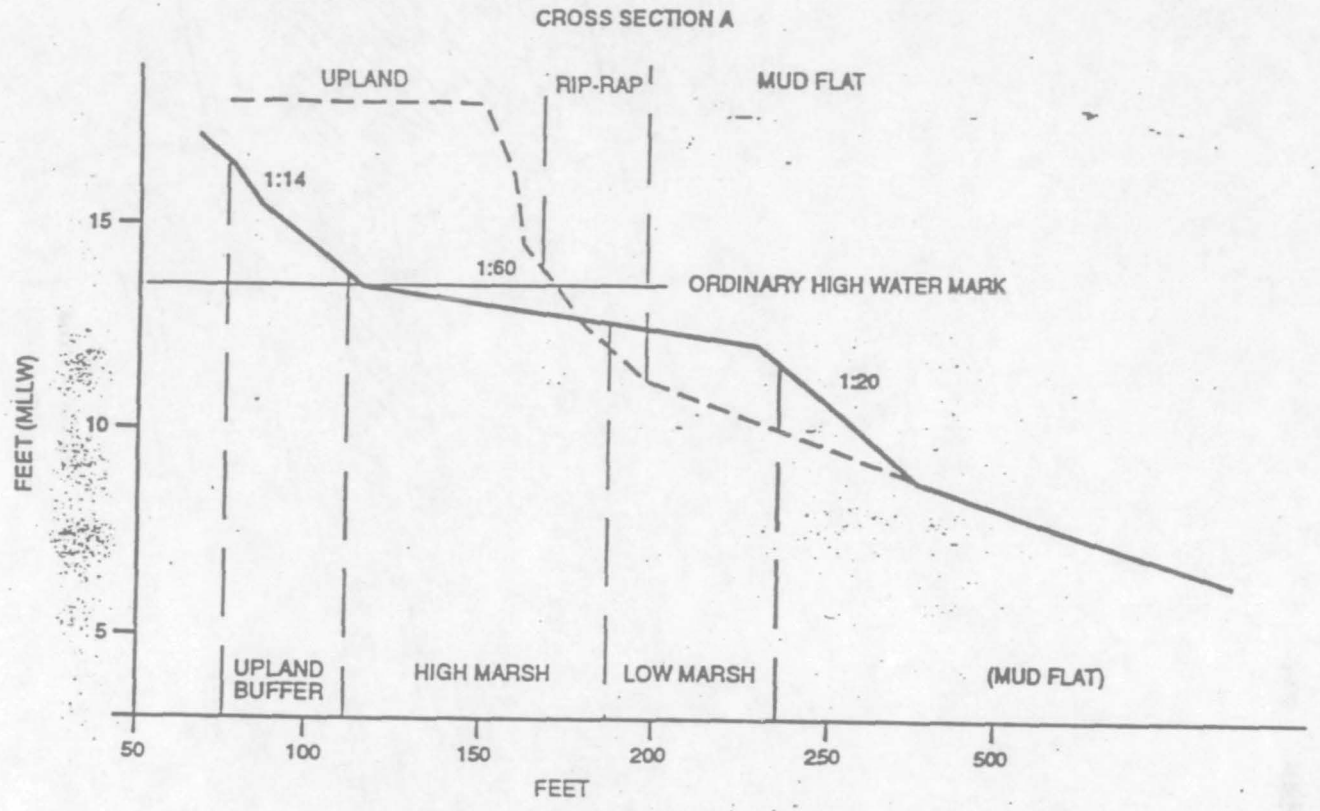
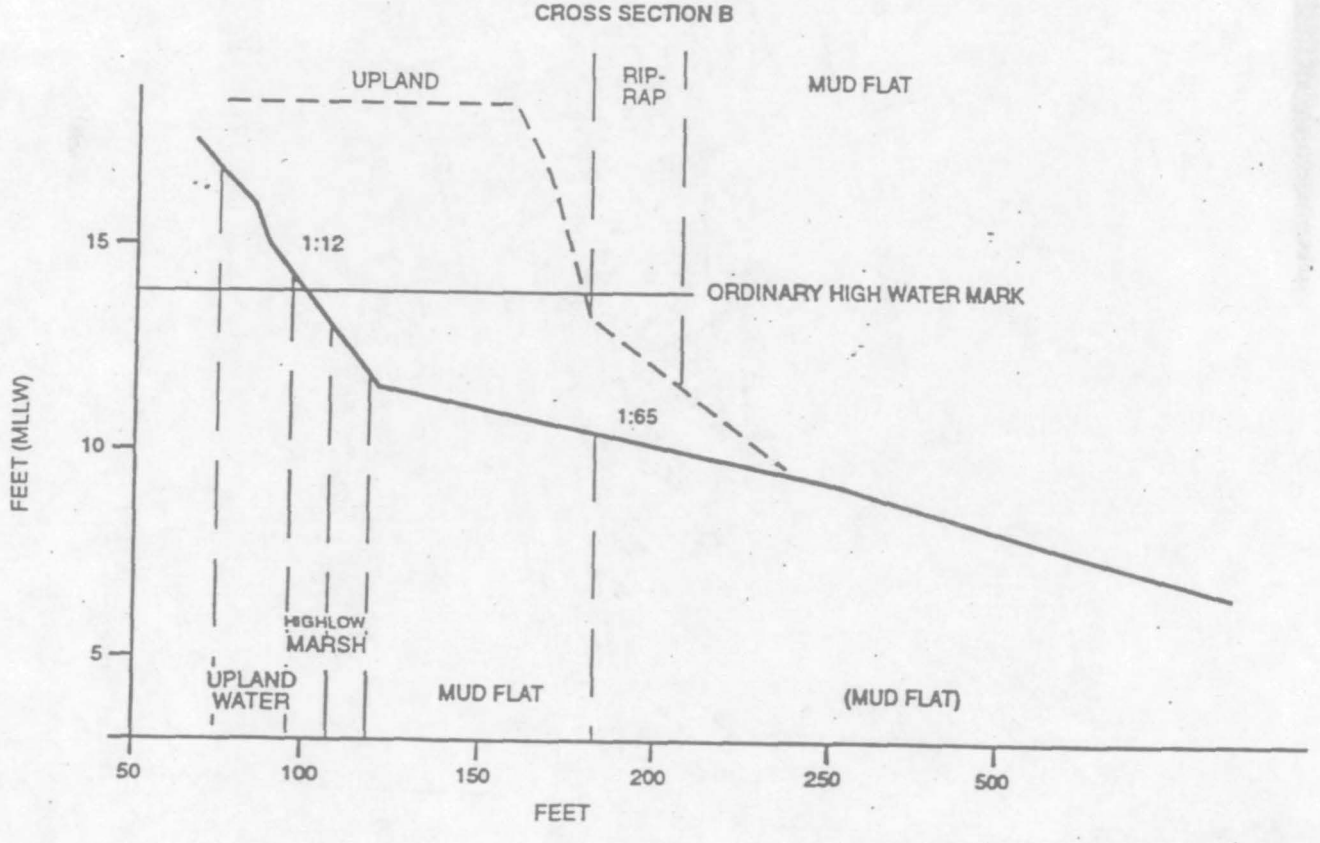


Figure 4.
Plan View
Proposed Final Grade
for the Middle Waterway





VERTICAL:HORIZONTAL
1:10

Existing Surface

Proposed Surface

Figure 5.
Cross Sections of Proposed

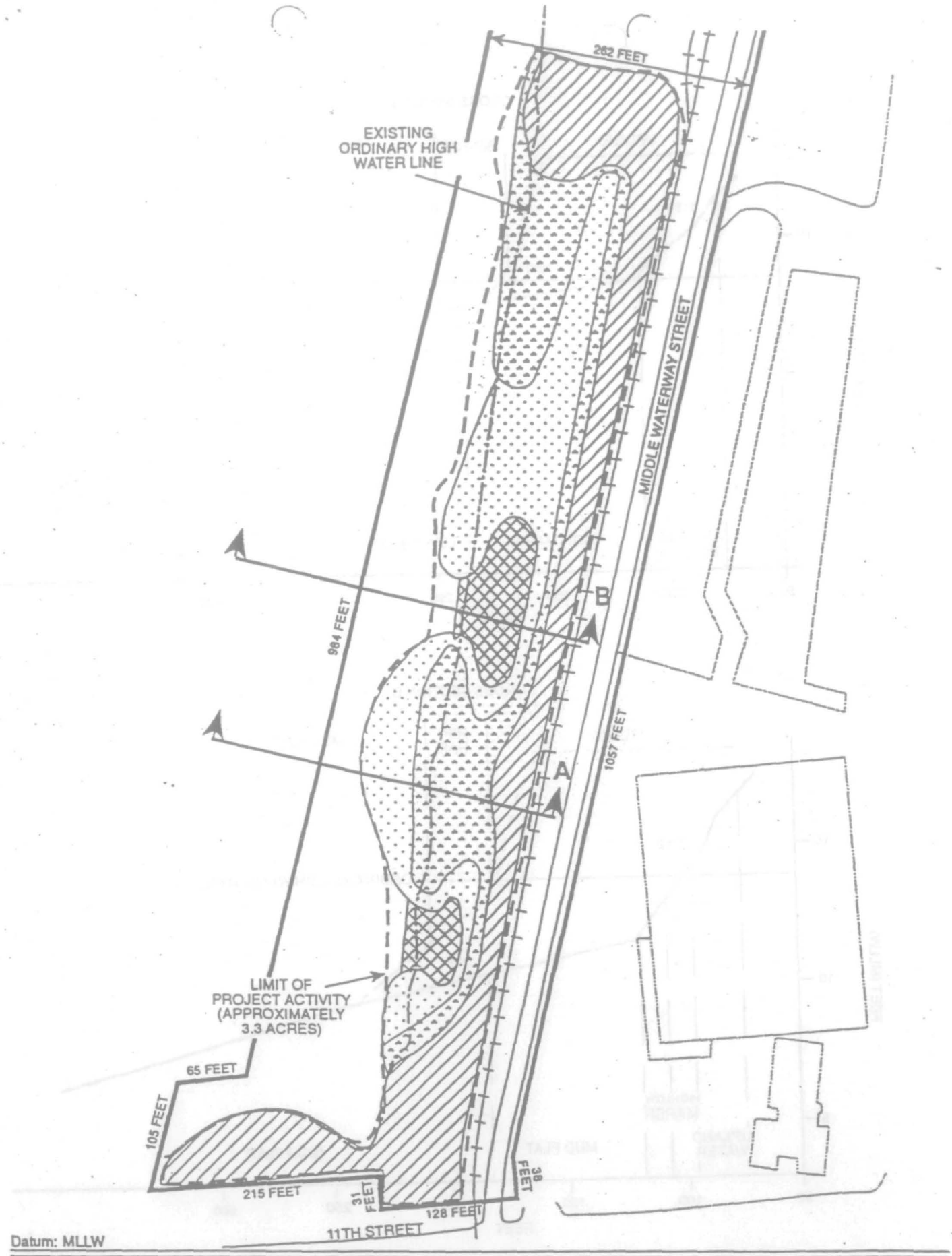


Figure 6.
Plan View
Middle Waterway
Shoreline Restoration
Vegetation Planting Plan

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

MAR 21 1995

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an Environmental Assessment (EA) has been performed on the following action:

TITLE: The Middle Waterway Restoration Project

LOCATION: Middle Waterway, Commencement Bay, Tacoma, Washington

SUMMARY: The Commencement Bay Natural Resource Trustees [the Puyallup Tribe of Indians; the Muckleshoot Indian Tribe; the Washington Department of Ecology (as lead state Trustee); the Washington Department of Fisheries and Wildlife; the Washington Department of Natural Resources; the U.S. Department of the Interior, including the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs; and the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce] are currently engaged in conducting a natural resource damage assessment and restoration planning for Commencement Bay (the Bay-wide NRDA).

In December 1991, Simpson Tacoma Kraft Co. (Simpson), Champion International Corp. (Champion) and the Washington Department of Natural Resources entered into a natural resource damages settlement with the Trustees regarding the St. Paul Waterway Problem Area. Under the agreement, Simpson and Champion (the companies) paid $500,000 in damages and agreed to work with the Trustees in planning a restoration project to be constructed using the damages. After a site evaluation process, the Trustees and the companies selected a parcel on the Middle Waterway owned by Simpson as the restoration project site (the Middle Waterway Habitat Restoration Project). Simpson has agreed that the property will be permanently committed to use for habitat restoration.

The Middle Waterway Habitat Restoration Project is designed to serve as a pilot project to develop information needed to plan and implement further

restoration in the Commencement Bay environment. In particular, the project will illuminate the procedures and time requirements needed to plan and obtain permits for such a project. In addition, the performance of the project will provide important insight into the viability of siting habitat restoration projects in close proximity to industrial activities on the Tacoma tideflats. The success of further Commencement Bay restoration planning depends to a considerable degree upon information to be gained from the Middle Waterway Restoration Project.

RESPONSIBLE OFFICIALS: Rolland A. Schmitten
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, Maryland 20910

The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact including the supporting EA is enclosed for your information. Please submit any written comments to the responsible official named above and to Bill Archambault; Office of Policy and Strategic Planning, Room 6117; U.S. Department of Commerce; Herbert Hoover Building; 14th and Constitution Avenue, N.W.; Washington D.C. 20230, at your earliest convenience.

Sincerely,

Donna Wieting

Donna Wieting
Acting Director
Ecology and Conservation Office

FINDING OF NO SIGNIFICANT IMPACT

Based on a review of this environmental permit and the available information relative to the proposed action, I concur with the U.S. Army Corps of Engineers, Seattle District that there will be no significant environmental impacts from this action. Furthermore, I agree that preparation of an Environmental Impact Statement on this action is not required by the National Environmental Policy Act or its implementing regulations.

MAR 16 1995

Gary Matlock

for Rolland A. Schmitten
Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

Date

MIDDLE WATERWAY RESTORATION PROJECT
COMMENCEMENT BAY
TACOMA, WASHINGTON

MIDDLE WATERWAY RESTORATION PROJECT PERMITS:

1) City of Tacoma Determination of Non-Significance (DNS)

- Washington State Environmental Policy Act (SEPA) Project Identification Code (PIC) File # D3322-93. Department File # 141.559.
- Issued on October 22, 1993.
- Issued pursuant to Washington Administrative Code (WAC) 197-11-340

2) Shoreline Substantial Development Permit

- Number 141.559
- Issued by the City of Tacoma on January 4, 1994.
- Issued pursuant to The Shorelines Management Act [Chapter 90.58, Revised Code of Washington (RCW)]
- September 21, 1993 the application received by the City of Tacoma.
- November 23, 1993 a public hearing held.
- December 20, 1993 - City of Tacoma Hearing Examiner recommended approval of the application submitted by the Simpson Tacoma Kraft Company pursuant to Tacoma Municipal Code Section 1.23.070.1 and Chapter 13.10 of the Official Code of the City of Tacoma.
- January 4, 1994 Permit granted by unanimous vote of the City Council.

Permit Conditions

- Prior to excavation, the applicant shall contact and coordinate any excavation and on-site containment or off-site removal and disposal of brass foundry debris found on the project site with the Ecology Commencement Bay Nearshore Tideflats Urban Bay Action Team to ensure consistency with Environmental Protection Agency (EPA) and Ecology Source Control Activities.
- The applicant shall record a deed restriction to ensure that the project provides habitat in perpetuity.
- The applicant shall secure an agreement with the Union Pacific Railroad to protect plantings during routine maintenance of the adjacent rail property.
- Construction shall conform to the proposal as described in the applicant's permit applications. As-constructed drawings shall be filed with the City upon completion.

3) Shoreline Substantial Development Permit

- Filed with the Washington Department of Ecology Shorelands and Coastal Zone Management Program as Permit Number 1994-15295
- Filed on January 6, 1994.
- The restoration project is located within the S-10 Port Industrial Shoreline District, and is designated as Urban in the Tacoma Shoreline Master Program (TSMP). The area upland of the shoreline district is zoned M-3 Heavy Industrial Zoning District.

4) Hydraulic Project Approval

- Issued by the Washington Department of Fish and Wildlife (WDFW) as Control No. 93-S1466-02.
- Issued on June 10, 1994.
- Issued pursuant to RCW 75.20.100 and 75.20.103

Permit Conditions

- Permit is valid beginning June 15, 1994. Work must be completed by March 15, 1996.
- Work below the ordinary high waterline shall not occur from March 15 through June 14 of any year for the protection of migrating juvenile salmonids.
- The Washington Department of Fish and Wildlife (WDFW) Region Habitat Manager must be notified at least seven working days prior to the start of construction.
- Project activities shall not occur when the project area is inundated by tidal waters.
- Trenches, depressions, or holes created in the intertidal area that could potentially entrap fish during high tides shall be connected to lower tidal areas by channels (to create escape routes) or backfilled prior to inundation by tidal waters.

5) Water Quality Certification.

- Issued by the Washington Department of Ecology as Public Notice No. 93-2-01466
- Issued on June 21, 1994.
- Issued pursuant to applicable provisions of sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act as amended, and other appropriate requirements of State Law.

Permit Conditions

- Certification is subject to compliance with the provisions of the enclosed Hydraulic Project Approval from the Washington Department of Fish and Wildlife (WDFW).
- If an oil sheen or distressed or dying fish are observed in the project vicinity, the operator shall cease immediately and notify the Department of Ecology of such conditions.
- Work in or the waterway shall be done during low tides in order to minimize turbidity, erosion and other water quality impacts.

6) Department of Defense, Army Corps of Engineers, Seattle District.

- Issued as File: 93-2-01466.
- Issued on September 19, 1994.
- Authorized pursuant to: Section 10 of the Rivers and Harbor Act of 1899 (33 U.S. C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The Department of the Army Permit Evaluation and Decision Document constituting the Finding of No Significant Impact, the Environmental Assessment, and the Section 404 (b) (1) Evaluation is included in the permit issuance.

Permit Conditions

- Valid until September 19, 1997 unless an extension is received.
- Monitor the project as specified in the Middle Waterway Shore Restoration Project Monitoring and Adaptive Management Plan, dated April 1994.
- Comply with the Water Quality Certification and Hydraulic Project Approval.
- Immediately notify the Army Corps of Engineers if previously unknown historical or archeological resources are discovered during construction.
- Notify the Army Corps of Engineers if the property and permit are transferred to a new party.
- Allow representatives from the Corps of Engineers to inspect the site to ensure compliance with the terms and conditions of the permit.
- Provide a copy of the permit to all contractors performing the authorized work.
- Record permit with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property.

MIDDLE WATERWAY RESTORATION PROJECT PERMITS:

Reference Number	Permit Agency	Date Issued	Name of Permit	Permit Number
1	City of Tacoma	10/22/93	Determination of Nonsignificance	141.559 SEPA-D3322-93
2	City of Tacoma	1/4/94	Shoreline Substantial Development Permit	141.559
3	Ecology	1/6/94	Shoreline Substantial Development Permit-FILED	1994-15295
4	Department of Fish and Wildlife	6/10/94	Hydraulic Project Approval	93-S1466-02
5	Ecology	6/21/94	Water Quality Certification	93-2-01466
6	Army Corps of Engineers	9/19/94	Section 404 of Clean Water Act and Section10 Rivers and Harbor Act	93-2-01466

Reference Number	Permit Conditions
1	NA
2	• Prior to excavation, the applicant shall contact and coordinate any excavation and on-site containment or off-site removal and disposal of brass foundry debris found on the project site with the Ecology Commencement Bay Nearshore Tideflats Urban Bay Action Team to ensure consistency with Environmental Protection Agency and Ecology Source Control Activities. • The applicant shall record a deed restriction to ensure that the project provides habitat in perpetuity. • The applicant shall secure an agreement with the Union Pacific Railroad to protect plantings during routine maintenance of the adjacent rail property. • Construction shall conform to the proposal as described in the applicant's permit applications. As-constructed drawings shall be filed with the City upon completion.
3	See above.
4	• Permit is valid beginning June 15, 1994. Work must be completed by March 15, 1996. • Work below the ordinary high waterline shall not occur from March 15 through June 14 of any year for the protection of migrating juvenile salmonids. • The Washington Department of Fish and Wildlife Region Habitat Manager must be notified at least seven working days prior to the start of construction. • Project activities shall not occur when the project area is inundated by tidal waters. • Trenches, depressions, or holes created in the intertidal area that could potentially entrap fish during high tides shall be connected to lower tidal areas by channels (to create escape routes) or backfilled prior to inundation by tidal waters.

5

- Certification is subject to compliance with the provisions of the Hydraulic Project Approval issued by the Department of Fish and Wildlife.
- If an oil sheen or distressed or dying fish are observed in the project vicinity, the operator shall cease immediately and notify the Department of Ecology of such conditions.
- Work in or the waterway shall be done during low tides in order to minimize turbidity, erosion and other water quality impacts.

6

- Valid until September 19, 1997 unless an extension is received.
- Monitor the project as specified in the Middle Waterway Shore Restoration Project Monitoring and Adaptive Management Plan, dated April 1994.
- Comply with the Water Quality Certification and Hydraulic Project Approval.
- Immediately notify the Army Corps of Engineers if previously unknown historical or archeological resources are discovered during construction.
- Notify the Army Corps of Engineers if the property and permit are transferred to a new party.
- Allow representatives from the Corps of Engineers to inspect the site to ensure compliance with the terms and conditions of the permit.
- Provide a copy of the permit to all contractors performing the authorized work.
- Record permit with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title to or interest in real property.

EXHIBIT D

RESTORATION PROJECT SUPPLEMENTAL INFORMATION SUMMARY -

MIDDLE WATERWAY SHORE RESTORATION PROJECT

(Parametrix, April 1994)

Project Analysis
Middle Waterway Shore Restoration Project

Project Supplemental Information Summary

Project Proposed by
Simpson Tacoma Kraft Company
Champion International Corporation
Natural Resource Trustees for Commencement Bay

Project Supplemental Information Summary prepared by **Parametrix, Inc.**

SUPPLEMENTAL INFORMATION SUMMARY

MIDDLE WATERWAY SHORE RESTORATION PROJECT

A summary of additional information on the Middle Waterway Shore Restoration Project that has been gathered since completion of the Project Analysis in September 1993.

To accompany local, state, and federal permit applications and other approvals pertaining to the Project.

Primary Authors

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Contributors

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April 1994

Project Proposed By

Simpson Tacoma Kraft Company

Champion International Corporation

National Resource Trustees for Commencement Bay

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1. INTRODUCTION

This Supplemental Information Summary has been prepared to provide the U.S. Army Corps of Engineers (the Corps), the Natural Resource Trustees for Commencement Bay (Trustees), other federal, state and local agencies, and the public with a summary and discussion of additional information on the Middle Waterway Shore Restoration Project (the project) that has been gathered since completion of the Project Analysis (Parametrix, September 1993). This supplemental information includes site-specific sampling results, construction and planting plans, and a monitoring and adaptive management plan to ensure the long-term success of the project.

The supplemental information is intended to support various approvals and permit applications to several agencies, including the application for a Section 10/404 permit from the Corps, to allow implementation of an additional restoration project to provide habitat value in perpetuity in the Commencement Bay environment under the 1991 St. Paul Waterway Natural Resource Damage settlement agreement entered into by the Trustees, Simpson Tacoma Kraft Company (Simpson), Champion International Corporation (Champion) and the Washington Department of Natural Resource (WDNR).

1.1 PROJECT SETTING, GOALS AND OBJECTIVES

The Middle Waterway Shore Restoration Project is a proposal to construct substantial new riparian and wetland habitat and to improve and protect intertidal habitat for bird and marine life on a site located on the southeastern shore of the Middle Waterway in Commencement Bay. See Figure 1. The Middle Waterway Shore Restoration Project is solely an environmental improvement or "restoration" project; it is not being implemented as part of a development project or as "mitigation" for a development project. By its nature, the project is water-dependent. It also is designed to compliment possible new upland stormwater pollution and prevention and treatment facilities being considered for adjacent industrial property and water-dependent maritime and harbor uses.

The primary actions at the project site will be to excavate and contour the upland portion of the site to restore a natural shoreline, and to plant appropriate natural vegetation at the new elevations. Approximately 3.3 acres of the project site will be modified. These actions will produce new upper intertidal marsh areas and an adjoining riparian buffer to support and preserve the integrity of the existing intertidal habitat and enhance Commencement Bay aquatic resources.

The project has the twin goals of providing long term environmental restoration and study value for planning future restoration projects in Commencement Bay. Its main objective is to provide valuable estuarine habitat within Commencement Bay, in perpetuity, at a location adjacent to one of the largest remaining areas of original Commencement Bay intertidal mudflat (nearly 20 acres) and functionally related to the intertidal habitat constructed at the north shore of the Tacoma

Kraft Mill in 1988, the Puyallup delta, and other nearby intertidal and shallow subtidal habita
Other environmental restoration objectives of the project include the following:

- Converting approximately 1.5 acres of upland from existing industrial use t estuarine intertidal wetland;
- Increasing the length of natural shoreline edge along the +9 to +13 foot contou from 840 to 960 feet;
- Establishing approximately 1.2 acres of habitat at known high and low saltmars elevations;
- Providing a riparian buffer and transition zone from tideflat to upland to screen protect and support the integrity of the remaining original Middle Waterwa mudflat and the diverse species that use this biologically productive area of th estuary; and
- Restoring a minimum of 0.23 acres of estuarine intertidal mud/sand habitat a mitigation for placing fill on a like acreage of intertidal mud/sand habitat at simila elevations.

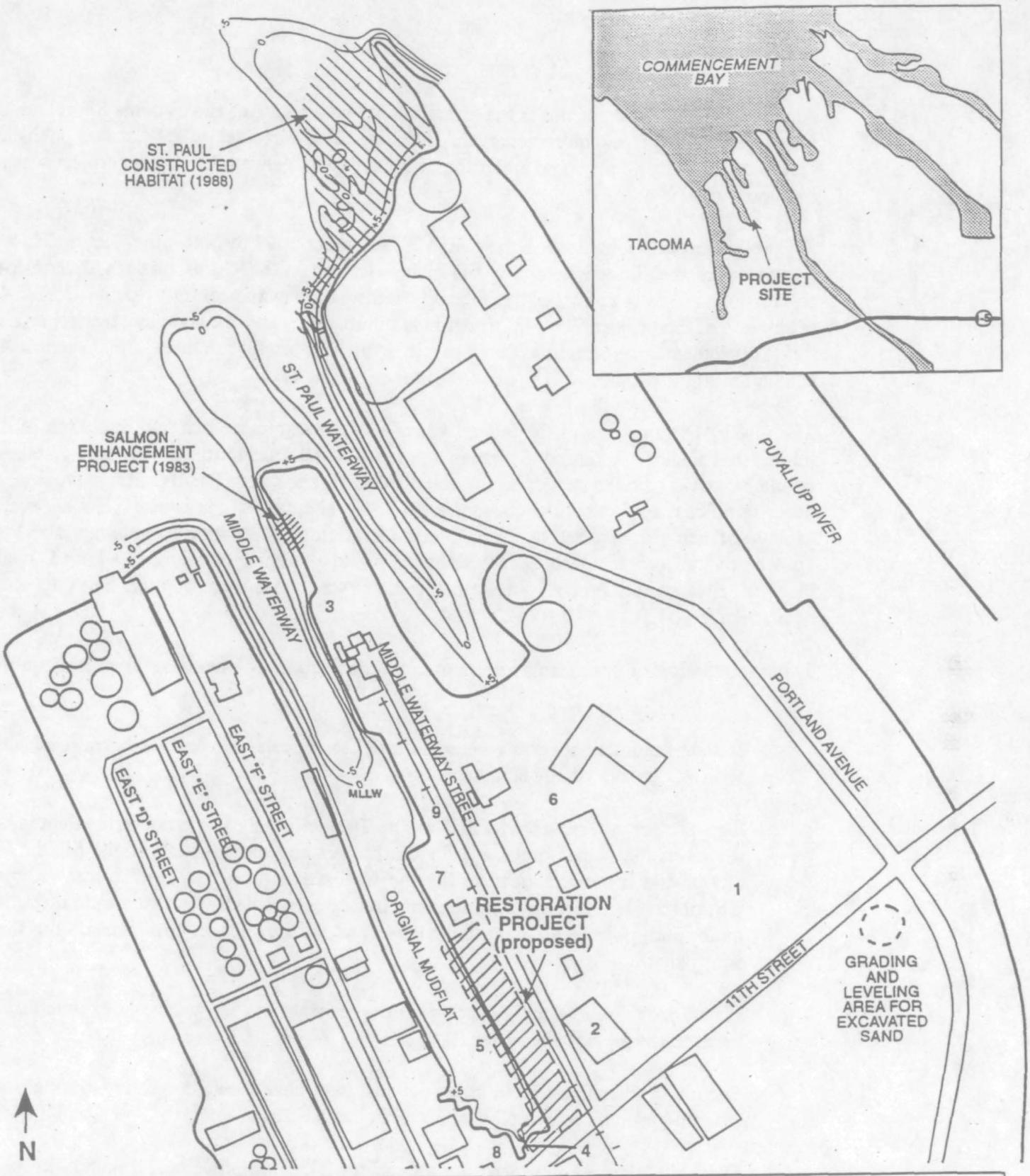
Pilot study objectives of the project include the following:

- Documenting and evaluating predictions regarding the general development of th new estuarine habitat in Commencement Bay;
- Determining if low to moderate levels of contamination within adjacent mudflat are transported to the new estuarine habitat; and
- Determining the relative success of different methods for establishing saltmars habitat in Commencement Bay.

Section 6.4 on "Monitoring and Adaptive Management" provides more detailed informatio regarding the descriptive and experimental studies on the restoration project site.

1.2 REGULATORY BACKGROUND

The Middle Waterway Shore Restoration Project includes excavation and re-contouring of th shoreline and limited dredging and filling in waters of the United States to establish the estuarir habitat and riparian buffer.



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2 Morse Industrial
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4 City of Tacoma
5 State of Washington/DNR
6 Investco Financial Corp.
7 Paxport Mills, Inc.
8 Pacific Yacht Basin
9 Union Pacific Railroad

FIGURE 1

VICINITY MAP, MIDDLE WATERWAY SHORE RESTORATION, COMMENCEMENT BAY

0 600 1200
1" = 600'

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

A combined Public Notice under the Shoreline Management Act and Tacoma Shoreline Management Program requirements, and the State Environmental Policy Act was published in October 1993. Local approval under the Shoreline Management Act for the project was received on January 4, 1994.

An application was submitted to the Corps in December 1993 to obtain the Section 10/404 permit to undertake the limited dredging and filling activity. The Corps made a determination that submission of site-specific sediment quality information was necessary to the Corps' 404(b)(1) evaluation of the project. This information is summarized, and the complete reports referenced, in this Supplemental Information Summary in a manner useful to the Corps' Section 404(b)(1) evaluation of the project.

The 404(b)(1) guidelines of the federal Clean Water Act require that "no discharge of dredge or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant environmental consequences." An alternative is practicable if it is "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." If the proposed dredging or filling is allowed, it also must include "all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem." 40 CFR § 230.10(a).

This examination of practicable alternatives under Section 404 has several considerations, which include:

- Is there another location where the proposal's goals and objectives can basically be met with less impact on the aquatic ecosystem?

  The project overview provided in the Project Analysis (Parametrix, September 1993) discusses the planning context for the project and the selection of the Middle Waterway site as the preferred location for the restoration project. The Trustees, Simpson and Champion identified no other location in Commencement Bay that would meet the project goals and objectives identified above and also result in less impact on the aquatic ecosystem.

- If not, are there alternative actions at the project site that will avoid or minimize potential harm to the aquatic ecosystem?

  Section 6 discusses alternative actions that have been developed during the project planning process to avoid or minimize impacts.

- Does the proposed project design include all appropriate and practicable measures to minimize potential environmental harm to the aquatic ecosystem?

Section 6 identifies the "appropriate and practicable measures to minimize potential harm to the aquatic ecosystem" that have been incorporated into the proposed project design.

1.3 DOCUMENTS INCORPORATED BY REFERENCE INTO THIS SUPPLEMENTAL INFORMATION SUMMARY

This Supplemental Information Summary summarizes information from the following reports on the Middle Waterway Shore Restoration Project that have been completed since the Project Analysis (Parametrix, September 1993):

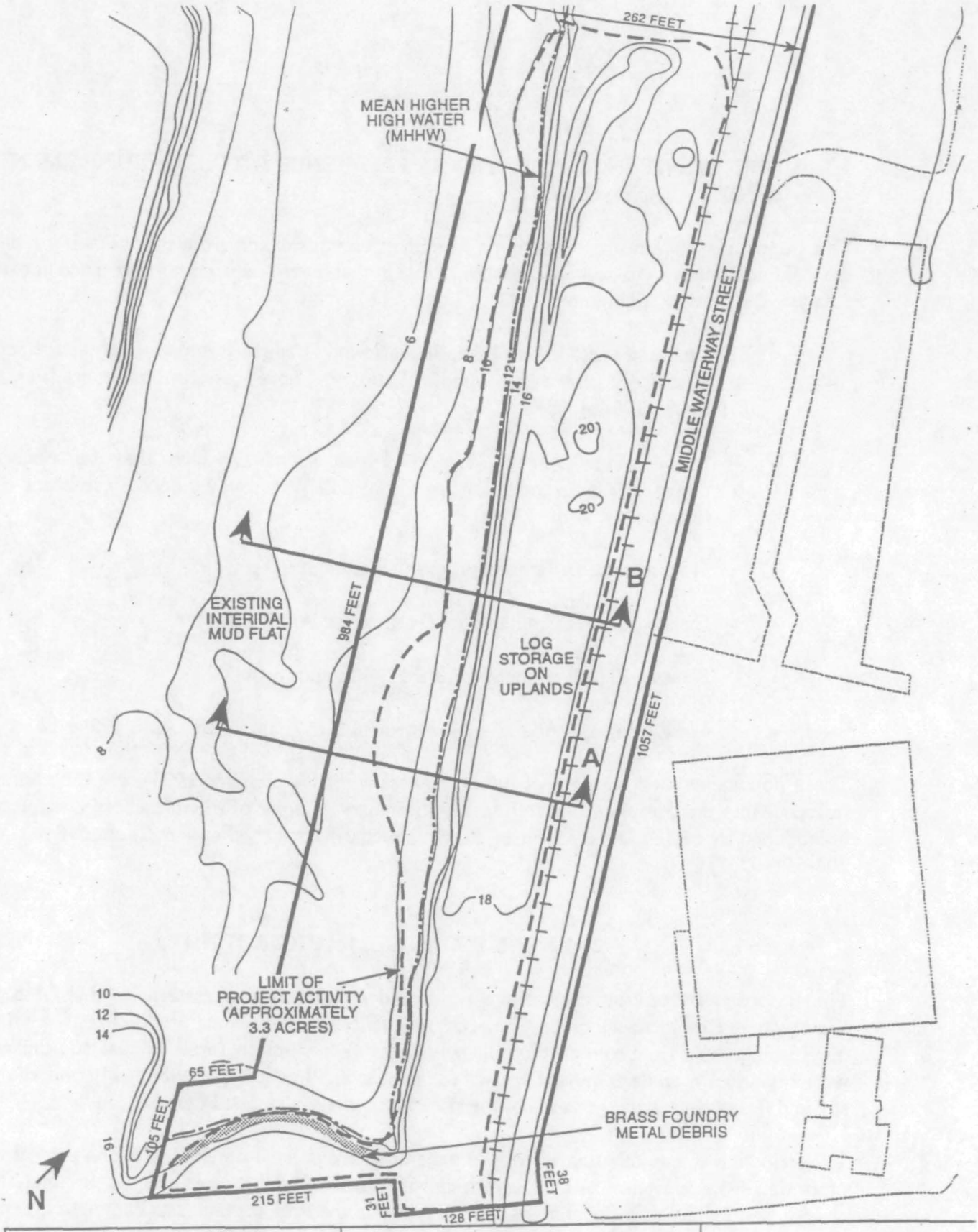
- Sampling and Analysis Plan, Puget Sound Dredged Disposal Analysis for Sediment Characterization at the Middle Waterway Shore Restoration Project (Parametrix, March 1994b);
- Sampling and Analysis Report, Puget Sound Dredged Disposal Analysis for Sediment Characterization at the Middle Waterway Shore Restoration Project (Parametrix, April 1994a);
- Preconstruction Sampling Report (Parametrix, April 1994b);
- Excavation and Grading Plan (Parametrix, April 1994c);
- Planting Plan (Parametrix, April 1994d); and
- Monitoring and Adaptive Management Plan (Parametrix, April 1994e).

These documents, and the Project Analysis (Parametrix, September 1993), are incorporated by reference into this Supplemental Information Summary. Copies of the referenced documents may be obtained by calling Dave McEntee, Environmental Manager, Simpson Tacoma Kraft Mill (at 206-596-0257).

2. ENVIRONMENTAL BACKGROUND

The proposed restoration project site is located along the southeastern shore of the Middle Waterway in Commencement Bay, adjacent to a relict mudflat owned predominantly by the State of Washington. The project site contains existing (apparently natural) tideflat and uplands that were historically, and are currently, used for lumber and log storage. Simpson owns the project site and leases the upland portions of the site to Paxport Mills. See Figure 2.

The following is a brief summary of the general environmental conditions of the project site. A more detailed description of the project site, its historical and present use, its soil and sediment quality, and its biological conditions may be found in the Project Analysis (Parametrix, September 1993), the Sampling and Analysis Plan (Parametrix, March 1994b), the Sampling and Analysis Report (Parametrix, April 1994a), and the Preconstruction Sampling Report (Parametrix, April 1994b).



PURPOSE: Restoration of Riparian and Wetland Habitat
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1 Commencement Bay Mill Co.
2 Morse Industrial
3 Foss Towing/Foss Maritime
4 City of Tacoma
5 State of Washington/DNR
6 Investco Financial Corp.
7 Paxport Mills, Inc.
8 Pacific Yacht Basin
9 Union Pacific Railroad

FIGURE 2

PLAN VIEW (PRE-PROJECT), MIDDLE WATERWAY SHORE RESTORATION, COMMENCEMENT BAY

0 100 200
1" = 100'

PROPOSED CONSTRUCTION C
RIPARIAN AND WETLAND HABI

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacc
Kraft Compar

2.1 GENERAL SOIL AND GROUNDWATER QUALITY

Soils on the project site consist of sand and gravel fill with occasional wood chips, overlain by a foot to foot and a half of sawdust and rotted bark and underlain by fluvial marine deposit (silt and sand) (McEntee, July 1993; Parametrix, 1988b). Based on color, grain size and proximity, it is likely that the site was originally filled with sand from dredging of the Puyallup River delta. The thickness of the fill is estimated to not exceed five to six feet. Groundwater is encountered at approximately eight to ten feet below ground surface. Groundwater levels are likely to respond to tidal fluctuations and seasonal variations (rainfall and surface drainage) (Parametrix, 1988b).

Existing and available environmental investigations of the project site reveal no current soil or groundwater contamination problems, with the apparent exception of limited surface contamination along the east bank of the head of the waterway (where brass foundry metal debris may be found containing metals above Commencement Bay Nearshore/Tideflats sediment cleanup objectives (SCOs)) (Parametrix, 1988b; HartCrowser, 1992b; Martinez, August 1993; Ecology UBAT, 1994). Testing of the brass foundry metal debris under the Toxicity Characteristic Leaching Procedure (TCLP) has shown the metals in the debris to be considerably below state dangerous waste (DW) and extremely hazardous waste (EHW) levels (Borque, April 1994), and therefore suitable for onsite containment. See Appendix A for more detailed information concerning the onsite containment of the brass foundry metal debris.

2.2 GENERAL SEDIMENT AND WATER QUALITY

Tideflats on and in the vicinity of the project site are sandy with typically 54% fine-grained material, and include a clay content of approximately 12% (David Evans and Associates, 1993). Three plus-feet of soft, recent (historical) sediment containing man-made debris overlay dense sand and silt layers which presumably represent the original deposit of the Puyallup delta and tideflats.

Past sampling has shown some of the tideflat surface sediments in the vicinity of the project site to be contaminated by metals and organic chemicals (principally mercury and PAHs) (Johnstone, 1985; Parametrix, 1988a: U.S. EPA, 1989; HartCrowser, 1991; HartCrowser, 1992a; HartCrowser, 1992b). The EPA Commencement Bay Record of Decision (Commencement Bay ROD) identified the City of Tacoma's stormwater drain #200 at the head of the waterway as the historical source of PAH contamination to the waterway (U.S. EPA, 1989). Existing information suggests that the situation is improving at stormwater drain #200 and that an enforcement action for source control is not necessary at this time (Ecology UBAT, 1994). Ecology UBAT investigations identified several properties on the other side of Middle Waterway (the southwestern side) as confirmed sources of metal contamination to the waterway (Ecology UBAT, 1994).

It is unlikely that the original mudflats at the head of the Middle Waterway lying adjacent to the project site will be identified by EPA or Ecology for active sediment remediation. This area lies outside of the Middle Waterway Problem Area, and is not identified for active remediation under the EPA Commencement Bay ROD (U.S. EPA, 1989). Although Ecology could list it in the

future as a contaminated sediment site under the state Sediment Management Standards (SMS) Ch. 173-204 WAC, because of the presence of moderate levels of mercury and PAHs, activ remediation would destroy one of the largest remaining remnants of original mudflat habitat i Commencement Bay. Active remediation of the mouth of the Middle Waterway, as contemplate by EPA, will also likely remove the main source of mercury contamination and other metals to th head of the Middle Waterway, as the presence of mercury in the mudflat sediments at the head o the waterway appears to occur through tidal agitation and mixing, dispersion and settling of th mercury on the tideflats (HartCrowser, 1992b).

In any event, the Middle Waterway Shore Restoration Project will not foreclose any futur cleanup options that might be undertaken by EPA or Ecology with respect to contaminate mudflat sediments in the vicinity of the project site. The project site lies at upper intertida elevations, above the general elevation of the mudflats at the head of the Middle Waterway Active remediation of any contaminated mudflat sediments could occur without disturbing th project site, especially if a silt curtain or other protective device was used to minimize th dispersion of dredged sediment material onto the project site.

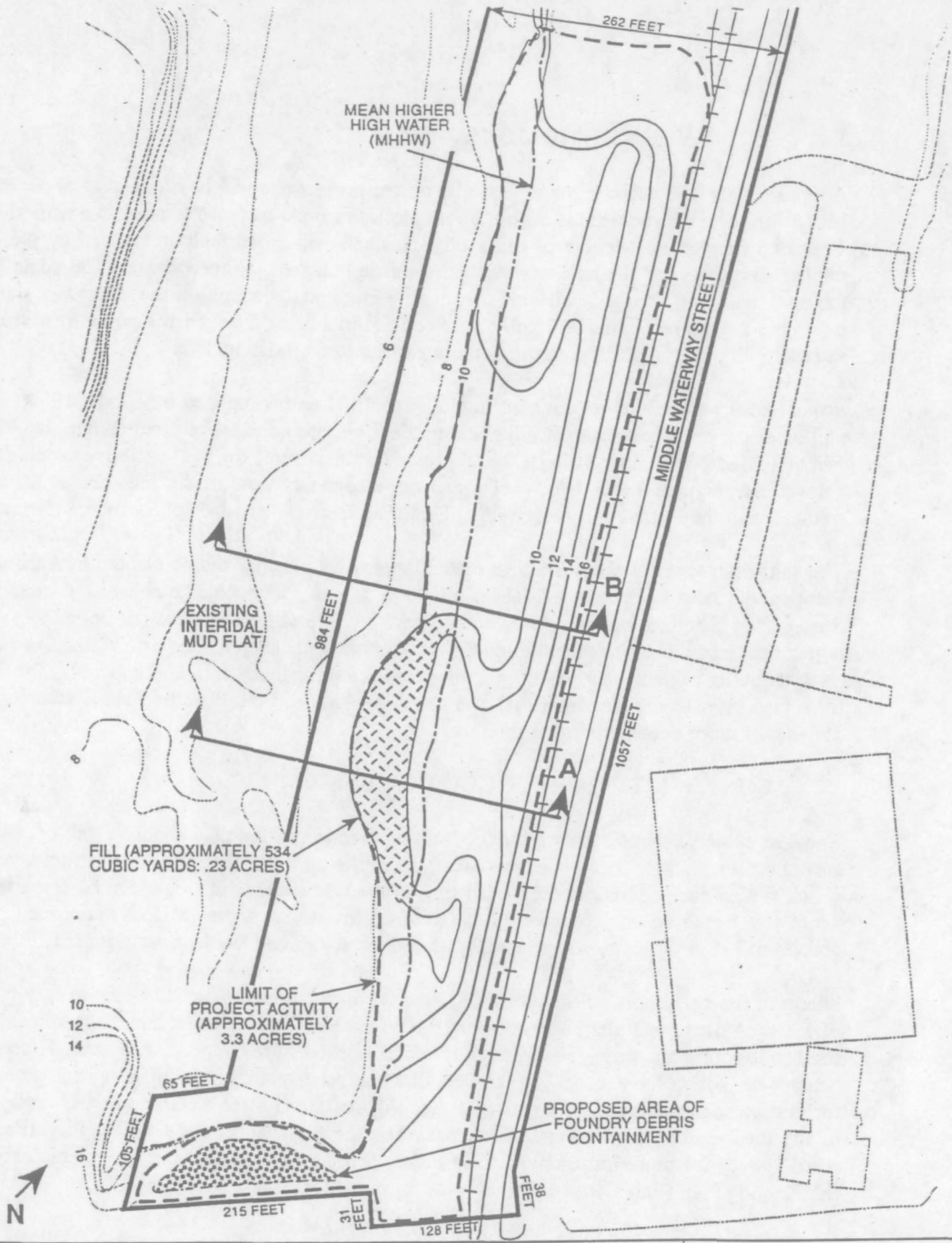
3. DESCRIPTION OF PROJECT ELEMENTS DIRECTLY AFFECTING THE AQUATIC ECOSYSTEM

Approximately 3.3 acres of the project site will be modified to support, compliment and enhanc the integrity of the existing mudflats. Primary actions at the project site directly affecting th aquatic ecosystem include:

- The excavation of tidal channels similar to those existing in a natural estuary;
- The construction of a vegetative bench similar to those commonly occurring in th marsh areas of Puget Sound estuaries; and
- The resloping of the head of the waterway.

These actions will increase the length of natural shoreline along the +9 to +13 contour of th Middle Waterway. They will also increase the acreage of estuarine intertidal and wetland habita and associated functional attributes in Middle Waterway and Commencement Bay.

The following is a brief summary of the need for, method and timing of construction of, an general characteristics and quantity of material involved in each of these project elements. Se Figure 3 for their location on the project site. A more detailed description of the project element may be found in the Project Analysis (Parametrix, September 1993), the Excavation and Gradin Plan (Parametrix, April 1994c), and the Planting Plan (Parametrix, April 1994d).



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9 Union Pacific Railroad

FIGURE 3

PLAN VIEW
PROPOSED FINAL GRADES FOR THE MIDDLE WATERWAY SHORE RESTORATION

0 100 200
1" = 100'

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

3.1 EXCAVATION OF TIDAL CHANNELS

Approximately 456 cubic yards of material on the project site will be dredged to about +8 to +9 MLLW to form two tidal channels on the project site similar to those existing in a natural estuary. The configuration and depths of these tidal channels will be strongly influenced by the existing tideflat elevations and the linear shape of the existing uplands. Approximately 156 cubic yards of the material being dredged will come from true mudflat sediments on the waterway side of the existing dike; the remaining 300 cubic yards of material being dredged will come from subsurface saturated fill material occupying the area shoreward of the existing dike.

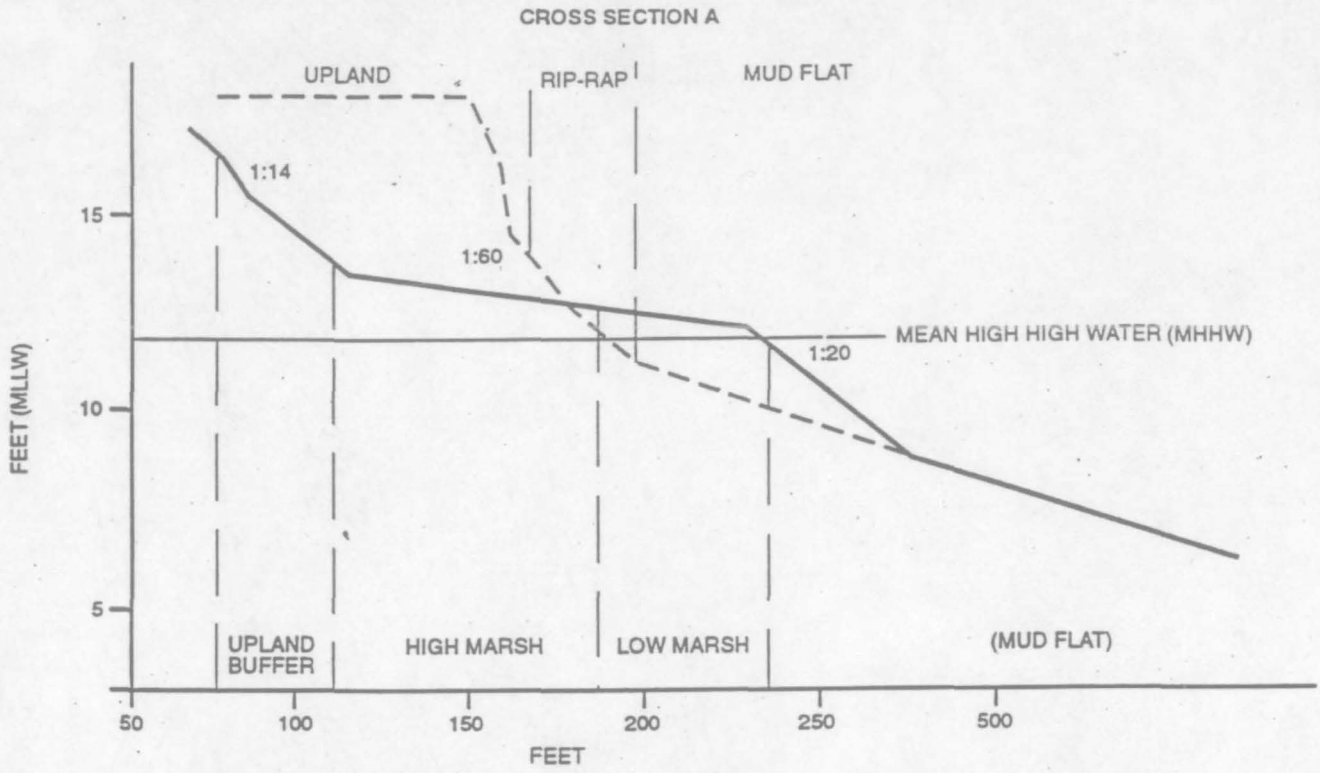
Project construction will be initiated in late June 1994 and completed in August 1994. A dozer will be employed to excavate, dredge and grade the project site. The dredged mudflat sediments will be reused on the site to topdress and provide a seed source for the vegetative bench described below. See Figures 3 and 4 for a plan and cross-sectional view of the final grades for the tidal channels and the Excavation and Grading Plan (Parametrix, April 1994c) for more information.

The saltmarsh areas to the northwest of the larger tidal channel will be planted in April of 1995. Planting during the Spring will allow the new plants to become established during the late Spring/early Summer period of maximum growth. The saltmarsh areas to the southeast of the larger tidal channel and surrounding the smaller tidal channel will not be planted, so that the relative merits of planting and non-planting restoration methods can be compared. See Figure 5 for a plan view of the new intertidal and marsh habitats and the Planting Plan (Parametrix, April 1994d) for more detailed information.

3.2 CONSTRUCTION OF VEGETATIVE BENCH

The 456 cubic yards of material dredged during creation of the tidal channels will be placed in a small portion (about .23 acres) of the existing mudflat on the project site to construct a vegetative bench similar to those commonly occurring in the marsh areas of Puget Sound estuaries. This vegetative bench will be constructed at the mean lower low water (MLLW) contour to support growth of Lyngby's sedge (*Carex lyngbyei*) and/or pickleweed (*Salicornia virginica*).

Filling of the small portion of the exiting mudflat on the project site will occur in July or August of 1994. A dozer will place and compact the fill material. The dredged mudflat sediments will be used to topdress and provide a seed source for a portion of the vegetative bench. The vegetative bench will not otherwise be planted, so that the relative merits of planting and non-planting restoration methods can be compared. See Figures 3 and 4 for a plan and cross-sectional view of the final grades for the vegetative bench and the Excavation and Grading Plan (Parametrix, April 1994c) for more information. See Figure 5 for a plan view of the new marsh habitats and the Planting Plan (Parametrix, April 1994d) for more detailed information.



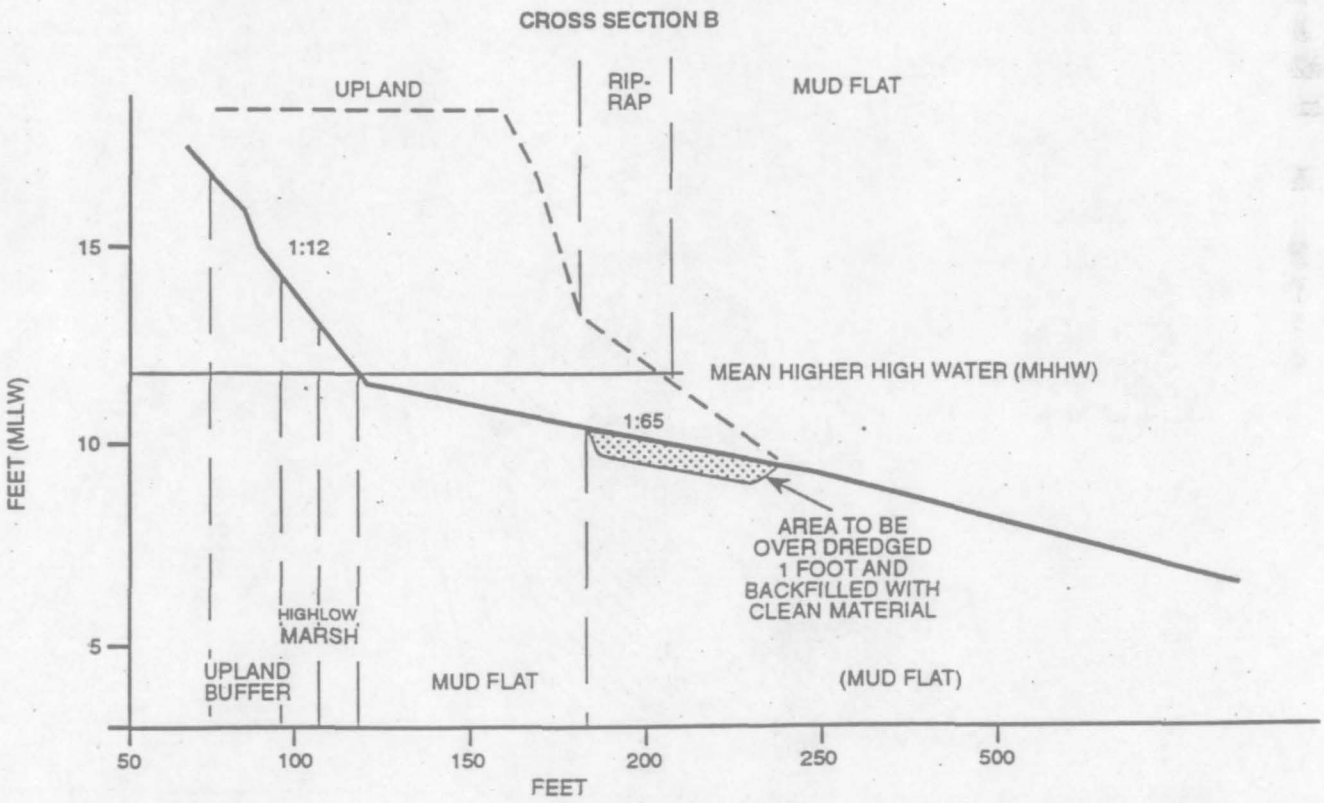


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FIGURE 4

CROSS SECTION OF PROPOSED HABITAT RESTORATION

VERTICAL:HORIZONTAL
1:10

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABITAT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacoma Kraft Company

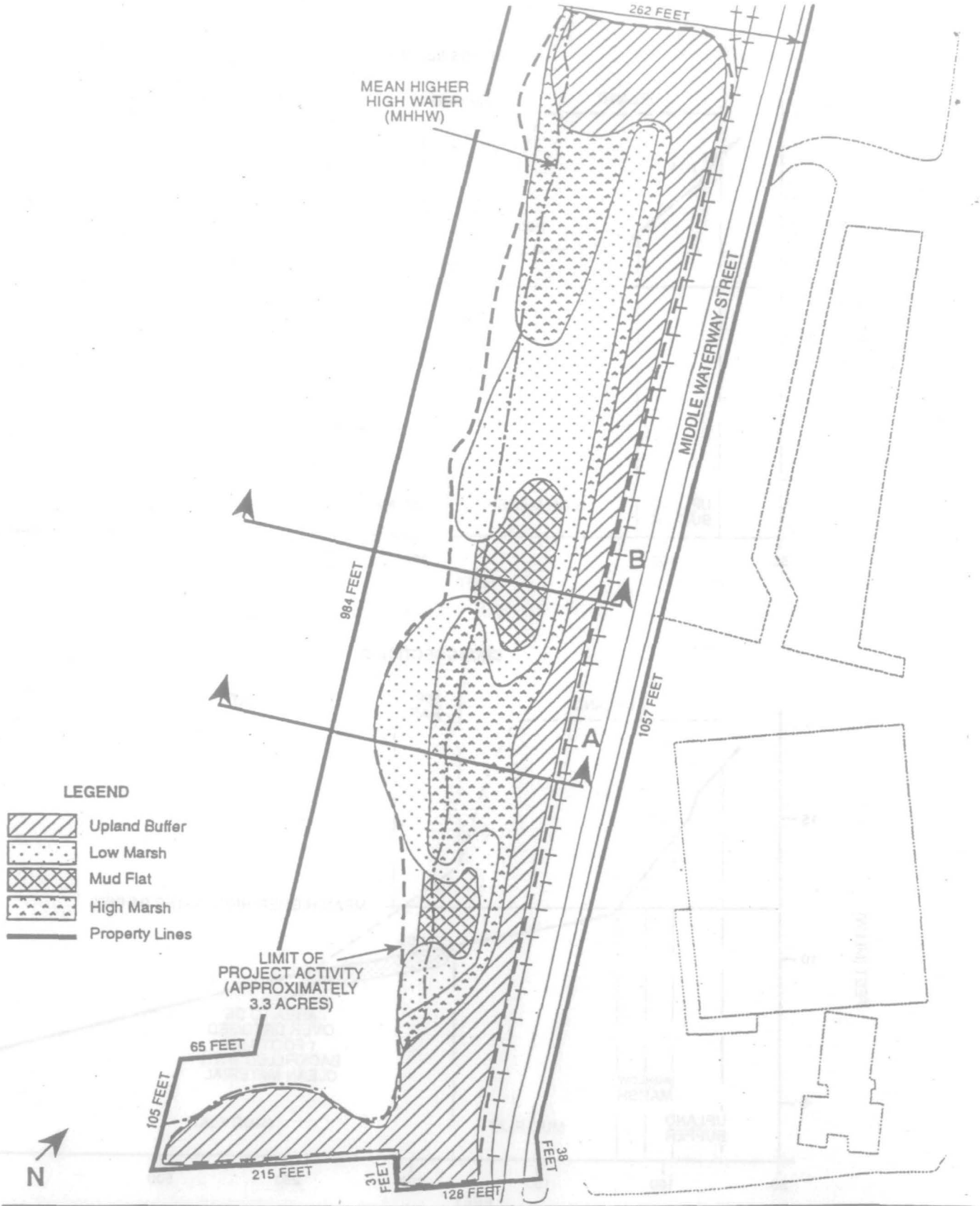

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FIGURE 5

PLAN VIEW
MIDDLE WATERWAY SHORE
RESTORATION VEGETATION PLANTING PLAN

0 100 200
1" = 100'

PROPOSED CONSTRUCTION OF RIPARIAN AND WETLAND HABIT

IN: Middle Waterway
AT: Tacoma
COUNTY OF: Pierce
STATE: Wa
APPLICATION BY: Simpson Tacon Kraft Company

3.3 RESLOPING OF THE HEAD OF THE WATERWAY

About 44 cubic yards of material will dredged during the resloping of the head of the waterway to natural contours. Resloping of the head of the waterway will occur during July and August of 1994. The dredged material will be removed from the aquatic environment and confined together with the brass foundry metal debris in the berm at the head of the waterway (see Appendix A for more information). See Figure 3 for a plan view of the final grades for the head of the waterway and the Excavation and Grading Plan (Parametrix, April 1994c) for more information.

The bank of the head of the waterway will be secured and planted immediately following project construction. Planting of the riparian upland buffer vegetation will occur in fall of 1994. See Figure 5 for a plan view of the new upland buffer riparian habitat and the Planting Plan (Parametrix, April 1994d) for more information.

4. POTENTIAL IMPACTS ON THE AQUATIC ECOSYSTEM

The following is a brief discussion of the potential impacts (both positive and negative) of the project on the physical, chemical, biological and human use characteristics of the Middle Waterway. A further discussion of these impacts may be found in the Project Analysis (Parametrix, September 1993).

4.1 PHYSICAL AND CHEMICAL CHARACTERISTICS

The project will alter the physical and chemical characteristics of the substrate along portions of the project site. The excavation of tidal channels will lower the elevation of two areas of the project site to below the mean higher high water (MHHW) mark and expose new surface sediments in those areas. The construction of the vegetative bench will raise the elevation of a portion of the project to above the MHHW. The resloping of the head of the waterway will also expose new surface sediments.

Minor erosion and turbidity could occur during excavation of the tidal channels, construction of the vegetative bench, and resloping of the head of the waterway. General methods to control erosion and turbidity during project construction will include the placement of: (a) 750 feet of silt fence in the waterway to contain the excavation sediments; and (b) straw mulch on exposed slopes. In addition, geogrid or other geosynthetic reinforcement will be placed on the new face of the slope at the head of the waterway to prevent erosion of the outer slope. If necessary, work conducted below the MHHW mark will also be limited to the six hours of low tide to minimize sediment discharge into the waterway.

The project will generally have a net positive or neutral effect on water quality. Containing the brass foundry metal debris found in the east bank of the head of the waterway, which contains materials that presently exceed SCOs (sediment cleanup objectives) for arsenic, copper, lead, nickel and zinc, will improve water quality in this area by eliminating a potential source of

contamination. Excavating the existing surface sediments in the area of the tidal channels, on the other hand, could have a minor adverse effect on water quality because of the exposure of surface sediments containing copper at levels slightly above the State Sediment Quality Standards (SQS) (see Section 5 below). Therefore, this area will be overdredged by one foot and backfilled with clean Puyallup sand material excavated elsewhere from the project site (see Section 6 below).

The project is not expected to have an impact on current patterns and water circulation and fluctuation in the overall project area. The project also will not impact salinity gradients in the overall project area.

4.2 BIOLOGICAL CHARACTERISTICS

The project is designed to enhance aquatic habitat through the restoration of estuarine intertidal and saltmarsh habitats. The project will provide a more complex component of the mudflat/ wetland ecosystem than currently exists in Middle Waterway or Commencement Bay. Only an estimated 57 acres (or 1%) of emergent marsh habitat remains in Commencement Bay of the estimated 3,814 acres of emergent marsh habitat that once occurred in a wide band between the MHHW level and the present location of Interstate 5 (David Evans and Associates, 1991; Shapiro and Associates, 1992). Much of this remaining emergent marsh habitat is probably not original habitat.

The project is expected to greatly enhance the aquatic food web over existing conditions at the site. New wetland habitat at the site will contribute to food chain production, fish and wildlife habitat, hydrologic support, shoreline protection, storm and floodwater storage, groundwater recharge, and water purification (Boule and Dybdahl, 1981). New riparian habitat at the site will provide nesting, roosting, feeding, and cover for mammals, reptiles, waterfowl and songbirds. It will also stabilize the bank of the waterway with roots, and filter out nutrient runoff from uplands.

The tideflat's habitat value will also increase because of the food source provided by the newly established riparian vegetation combined with the protection provided by this buffer strip. Thus, the habitat will become more valuable to both aquatic organisms such as young marine fish and salmonids, as well as to the shorebirds and otter that presently use the Middle Waterway tideflat. Intertidal flats contribute nesting, nursery, and feeding habitat for invertebrates and fish; feeding and resting habitat for birds and mammals; nutrient cycling; shoreline protection from erosion; and dissipation of storm surge runoff (40 CFR § 230.42).

Animals expected to use the new habitat include primarily young fish and shorebirds. Young marine and anadromous fish would use the new habitat during high tide periods. Shorebirds would most likely use the new habitat during moderate and low tide periods. No Federally listed threatened or endangered species will be impacted by the project.

4.3 SPECIAL AQUATIC SITES

The project will increase the acreage of wetland and mudflat habitats on the project site. Currently, the project site only contains a very narrow fringing saltmarsh waterward of the

ordinary high water mark (there are no freshwater wetlands on the project site). Although a small portion of the existing mudflat habitat on the project site (.23 acres) will be filled to create wetland habitat, additional mudflat habitat will also be restored resulting in a slight net increase of mudflat habitat on the site (expected to be approximately .30 acres).

4.4 HUMAN USE CHARACTERISTICS

The project is expected to have a net positive impact on recreational and commercial fisheries in the Puyallup River/Commencement Bay areas by provision of habitat that may be used by young marine fish and salmonids. Other than positive impacts on fisheries, no other water-related recreation will be impacted by the project.

Views in the immediate vicinity of the project site will be improved by the project. The project will restore the natural shoreline and create a natural transition from the original mudflat to upland industrial uses. The project will also remove debris from the surface of the site, restore riparian and wetland habitat on-site, and establish a vegetative buffer to screen the estuarine habitat from adjacent human activity.

The project will enhance the Commencement Bay fishery resource by restoring intertidal habitat, which provides valuable rearing habitat for juvenile salmon and other fish. There are no known landmarks or evidence of historic, archaeological, scientific or cultural importance on or next to the site.

5. EVALUATION AND TESTING OF DISCHARGE MATERIAL

A sediment characterization study of the project site was undertaken in February 1994. The purposes of this study were to:

- Characterize the sediment (approximately 156 cubic yards) and subsurface saturated fill material (approximately 300 cubic yards) to be dredged and placed within the intertidal area to create the vegetative bench;
- Characterize the sediment (approximately 44 cubic yards) to be dredged from the intertidal area to reslope the head of the waterway to natural contours; and
- Confirm that the newly exposed surface sediment quality in the intertidal and excavated upland areas approximates the existing surface sediment quality in these areas.

The sampling and analysis plan for the sediment characterization study is provided in the Sampling and Analysis Plan (Parametrix, March 1994b). The results of the sediment characterization study are provided in the Sampling and Analysis Report (Parametrix, April 1994a).

The following is a brief summary of the results of this sediment characterization study. See Figures 6 through 8 for the on-site locations of the sediment station positions, and Tables 1 and 2 for a comparison of the chemistry results to State Sediment Quality Standards (SQS) and PSDDA screening levels for PSDDA chemicals of concern not covered under the State SQS.

Only two parameters in the five stations were detected above the SQS. Sample B (surface sediments that will be removed from the aquatic environment during resloping of the head of the waterway) contained mercury at a concentration slightly above the SQS (0.650 mg/kg versus SQS of 0.410 mg/kg). During resloping of the head of the waterway, these surface sediments will be removed from the aquatic environment and contained together with the brass foundry metal debris in the berm at the head of the waterway. Sample D (subsurface material which will form the surface of the newly graded restoration area) contained copper at a concentration slightly above the SQS (430 mg/kg versus SQS of 390 mg/kg). During excavation of the tidal channels this area will be overdredged by one foot and backfilled with clean Puyallup sand material excavated from elsewhere on the project site. The dredged subsurface sediments containing the elevated copper (approximately 160 cubic yards) will be removed from the aquatic environment and blended with the regraded upland soils elswhere on the project site.

Several other parameters (including hexachlorobenzene in samples A and C, and butylbenzyl phthalate and total PCBs in sample C) were non-detected at a detection limit slightly above the SQS. These non-detects are not considered significant. Hexachlorobenzene has never been identified as a chemical of concern in any of the studies previously conducted in Middle Waterway, and none of the chemically related compounds such as di- and tri-chlorobenzenes were detected in samples A and C. Sample C has extremely low organic carbon content (0.24 % dry weight), making lower detection limits very difficult to obtain. Finally, these non-detects are considerably below the State Minimum Cleanup Level (MCUL) for each chemical of concern.

6. ACTIONS TO AVOID AND MINIMIZE ADVERSE IMPACTS ON THE AQUATIC ECOSYSTEM

The following is a brief discussion, for each of the proposed project elements directly affecting the aquatic ecosystem, of the actions developed during project planning and public review to reduce any identified adverse effects of the proposed project elements (primary and secondary effects).

6.1 EXCAVATION OF TIDAL CHANNELS

The excavation of tidal channels is expected to result predominantly in positive impacts on the aquatic environment on the project site, including an increase in estuarine habitat valuable to bird and aquatic life. The only likely adverse impacts on the aquatic ecosystem associated with this project element are minor erosion and turbidity impacts occurring during project construction and minor adverse effects on water quality that could result from exposure of subsurface sediments containing copper at concentrations slightly above the State SQS.

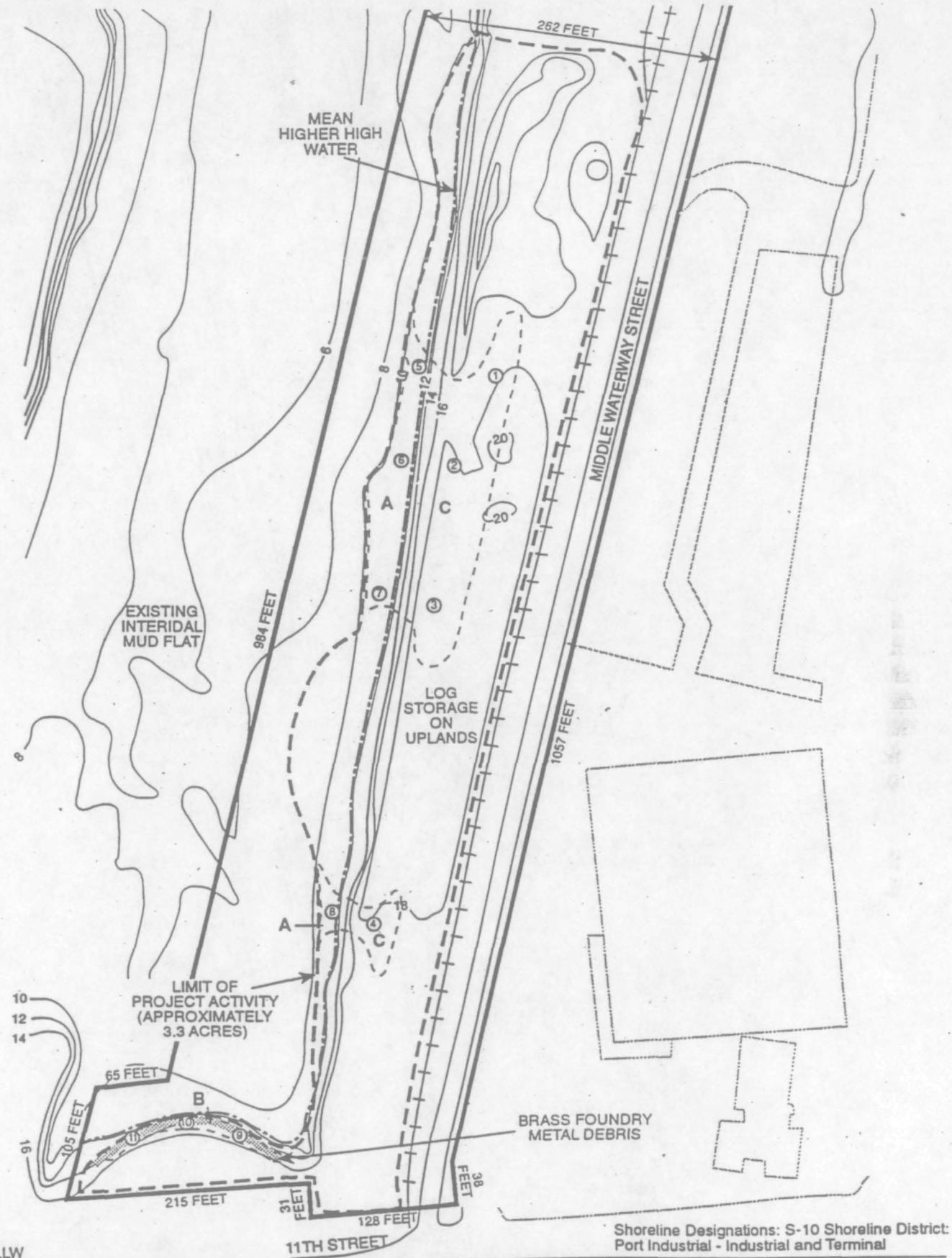

Figure 6.
Plan View (Pre-Project) Middle Waterway Shore Restoration Project (Location of Dredge Units)

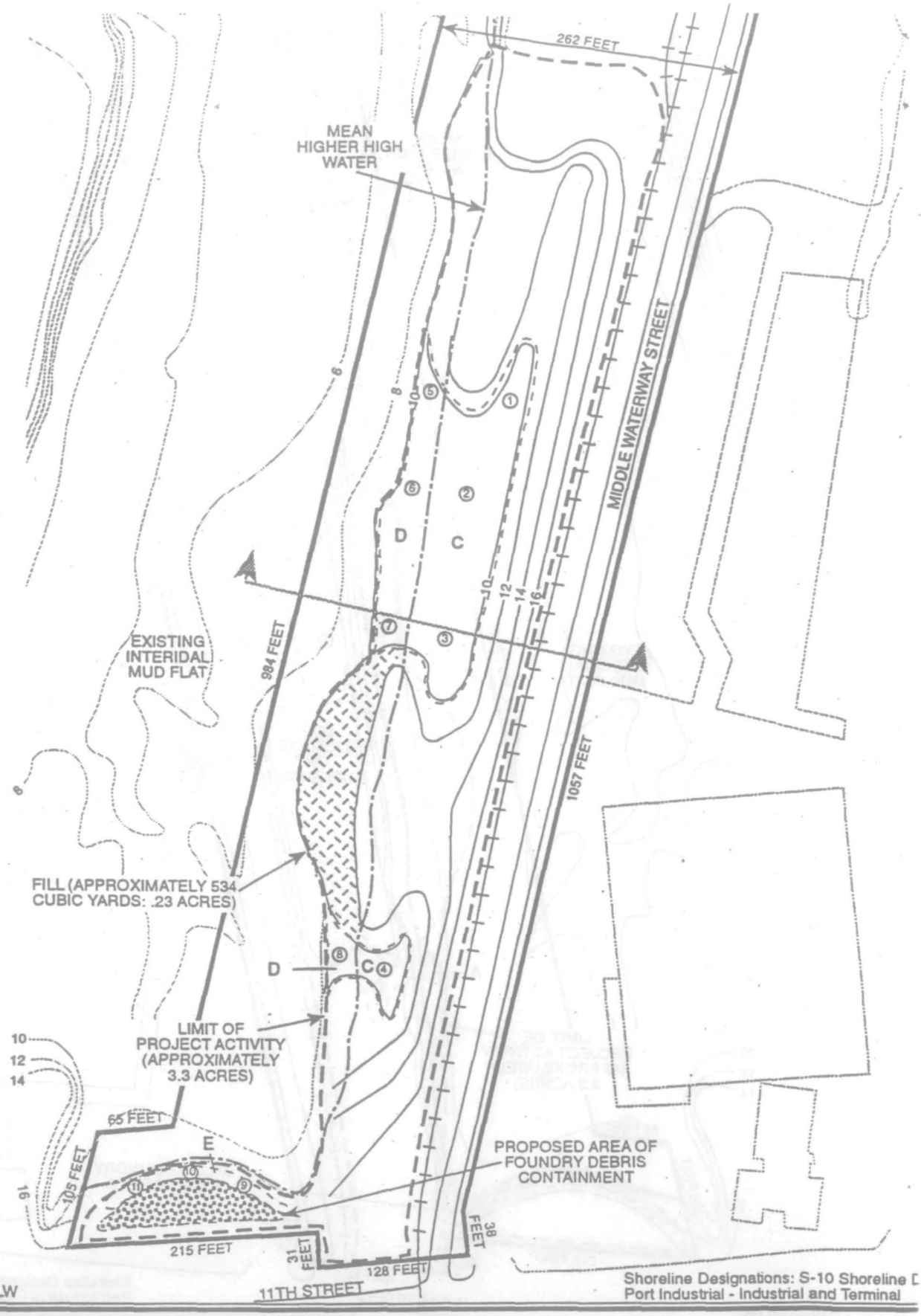

Figure 7.
Plan View Propo
Final Grade for t
Middle Waterwa
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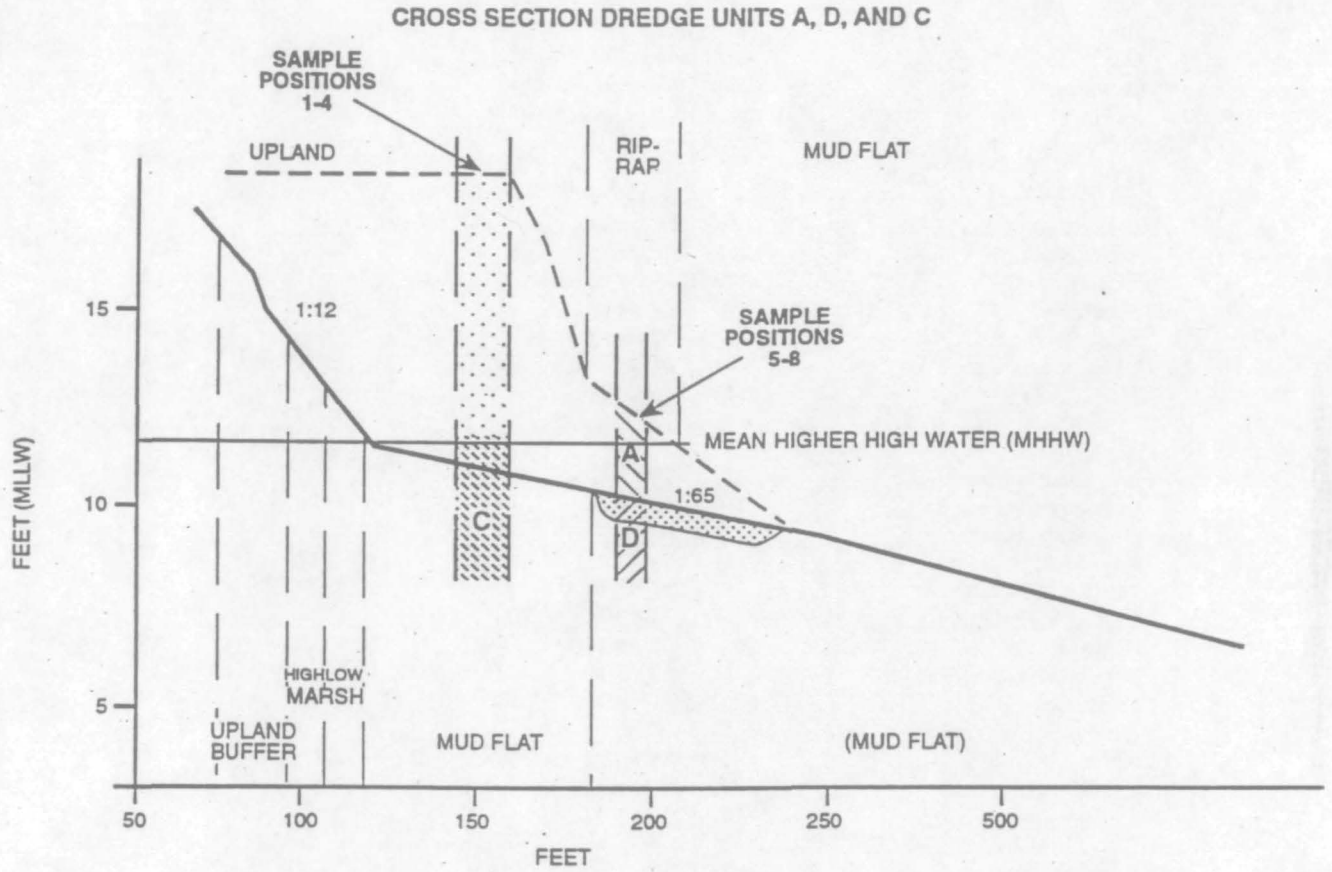
Units to be Expc



A Dredge Unit Designation

Area to be Over Dredged 1 Foot and Backfilled with Clean Material

Soil to be Removed with Backhoe

Existing Surface

Proposed Surface

VERTICAL:HORIZONTAL
1:10

Figure 8.
Cross Sections of Proposed Habitat Restoration (Showing Dredge Units A, C and D)

Table 1. Middle Waterway chemical results, appropriate organics normalized for carbon, 1994.

CHEMICAL	State MCUL	State SQS	A	B	C	D	E	A dup.
METALS								
* Antimony	--	--	3.1	8.2	2.1	2.2	2.2	4.3
* Arsenic	93	57 mg/kg	11	13	3.9	5.1	4.2	8.9
* Cadmium	6.7	5.1 mg/kg	0.94	1.2	0.36	0.46	1.5	0.98
* Copper	390	390 mg/kg	100	280	35	430	82	120
* Lead	530	450 mg/kg	200	170	96	210	290	220
* Mercury	0.59	0.41 mg/kg	0.393	0.650	0.037	0.150	0.103	0.371
* Nickel	--	--	36	52	40	33	40	40
* Silver	6.1	6.1 mg/kg	0.36	0.24	0.13	0.22	0.21	0.18
* Zinc	960	410 mg/kg	330	260	320	190	380	320
* Chromium	270	260 mg/kg	110	65	48	40	50	38
ORGANICS								
LPAH								
Acenaphthylene	66	66 mg/kg	3	1	8 U	8	5	3
Acenaphthene	57	16 mg/kg	3	1	8 U	3	1	3
Anthracene	1,200	220 mg/kg	5	2	8 U	18	10	6
Fluorene	79	23 mg/kg	4	1	8 U	6	3	4
Naphthalene	170	99 mg/kg	8	3	8 U	6	4	10
Phenanthrene	480	100 mg/kg	23	10	9	20	12	20
2-Methylnaphthalene	64	38 mg/kg	3	1	8 U	2	1	4
Total LPAH's	780	370 mg/kg	49	20	54	62	36	50
HPAH								
Benzo(a)anthracene	270	110 mg/kg	26	9	8 U	60	36	20
Benzo(a) pyrene	210	99 mg/kg	34	15	17	76	49	29
Benzo(b)fluoranthenes	--	--	43	23	23	74	51	39
Benzo(k)fluoranthenes	--	--	14 J	6 J	8 U	19 J	14 J	11 J
Total benzofluoranthenes	450	230 mg/kg	57	29	30	93	65	50
Benzo(g,h,i)perylene	78	31 mg/kg	22	7	27	24	16	14
Chrysene	460	110 mg/kg	26	12	11	52	17	23
Dibenzo(a,h)anthracene	33	12 mg/kg	5	2	8 U	8	4	3
Fluoranthene	1,200	160 mg/kg	26	14	13	26	34	22
Indeno(1,2,3,-c,d)pyrene	88	34 mg/kg	23	8	21	26	19	15
Pyrene	1,400	1000 mg/kg	34	21	17	67	44	48
Total HPAH's	5,300	960 mg/kg	311	146	182	524	348	275
CHLORINATED HYRDROCARBONS								
Hexachlorobenzene	2.3	0.38 mg/kg	0.43 U[1]	0.30 U	0.41 U[1]	0.33 U	0.22 U	0.42 U
1,2-Dichlorobenzene	2.3	2.3 mg/kg	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
1,3-Dichlorobenzene	--	--	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
1,4-Dichlorobenzene	9	3.1 mg/kg	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
1,2,4-Trichlorobenzene	1.8	0.81 mg/kg	0.22 U	0.15 U	0.375 U	0.16 U	0.11 U	0.21 U
PHTHALATES								
bis(2-Ethylhexyl) phthalate	78	47 mg/kg	5.7	8.2	9.2	0.9	1.9	4.5
Butylbenzyl phthalate	64	4.9 mg/kg	1.1	0.8	7.5 U[1]	0.5 U	0.4 U	1.2
Diethyl phthalate	110	61 mg/kg	0.74 U	0.51 U	7.50 U	0.55 U	0.36 U	0.70 U
Dimethyl phthalate	53	53 mg/kg	0.74 U	0.51 U	7.50 U	0.55 U	0.36 U	0.70 U
Di-n-Butyl phthalate	1,700	220 mg/kg	0.74 U	0.51 U	7.50 U	0.55 U	0.36 U	0.70 U
Di-n-octyl phthalate	4,500	58 mg/kg	0.74 U	0.51 U	7.50 U	0.55 U	0.36 U	0.70 U
PHENOLS								
* Pentachlorophenol	690	360 µg/kg	64 U	71 U	45 U	58 U	53 U	57 U
* Phenol	1,200	420 µg/kg	26 U	31	18 U	23 U	21 U	23 U
* 2-Methylphenol	63	63 µg/kg	13 U	14 U	9.1 U	12 U	11 U	11 U
* 4-Methylphenol	670	670 µg/kg	27	43	18 U	23 U	28	46
* 2,4-Dimethylphenol	29	29 µg/kg	13 U	14 U	9.1 U	12 U	11 U	11 U

Table 1. Middle Waterway chemical results, appropriate organics normalized for carbon, 1994.

CHEMICAL	State MCUL	State SQS	A	B	C	D	E	A dup.
MISCELLANEOUS COMPOUNDS								
* Benzoic Acid	650	650 µg/kg	130 U	140 U	91 U	120 U	110 U	110 U
* Benzyl alcohol	73	57 µg/kg	15 U	17 U	11 U	14 U	13 U	14 U
Dibenzofuran	58	15 mg/kg	1.86	0.84	7.50 U	2.02	1.02	2.24
Hexachlorobutadiene	6.2	3.9 mg/kg	0.57 U	0.40 U	1.25 U	0.45 U	0.29 U	0.55 U
Hexachloroethane	--	--	0.74 U	0.51 U	7.50 U	0.55 U	0.36 U	0.70 U
N-Nitrosodiphenylamine	11	11 mg/kg	0.43 U	0.30 U	4.58 U	0.33 U	0.22 U	0.42 U
VOLATILE ORGANICS								
Ethylbenzene	--	--	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
Tetrachloroethene	--	--	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
Trichloroethene	--	--	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
Xylenes	--	--	0.09 U	0.07 U	1.25 U	0.07 U	0.05 U	0.09 U
PESTICIDES & PCB's								
Aldrin	--	--	0.16	0.05 U	0.46 U	0.07 U	0.05 U	0.10 U
Chlordane	--	--	0.09 U	0.05 U	0.46 U	0.07 U	0.05 U	0.10 U
DDD	--	--	0.15 U	0.07 U	0.75 U	0.11 U	0.09 U	0.17 U
DDE	--	--	0.15	0.06 U	0.58 U	0.09 U	0.07 U	0.18
DDT	--	--	0.29 U	0.15 U	1.50 U	0.22 U	0.17 U	0.33 U
Dieldrin	--	--	0.12 U	0.06 U	0.58 U	0.09 U	0.07 U	0.14 U
Heptachlor	--	--	0.09 U	0.05 U	0.46 U	0.07 U	0.05 U	0.10 U
Lindane	--	--	0.09 U	0.05 U	0.46 U	0.07 U	0.05 U	0.10 U
A-1016	--	--	0.37 U	0.75 U	1.88 U	0.29 U	0.17 U	0.33 U
A-1221	--	--	1.49 U	2.98 U	7.5 U	1.10 U	0.71 U	1.39 U
A-1232	--	--	0.37 U	0.75 U	1.88 U	0.29 U	0.17 U	0.33 U
A-1242	--	--	0.37 U	0.75 U	1.88 U	0.29 U	0.17 U	0.33 U
A-1248	--	--	0.37 U	0.75 U	1.88 U	0.29 U	0.17 U	0.33 U
A-1254	--	--	0.37 U	0.75 U	1.88 U	0.29 U	0.17 U	0.33 U
A-1260	--	--	0.60	1.65	1.88 U	0.29 U	0.17 U	0.73
Total PCB's	65	12 mg/kg	3.94	8.40	18.78 [2]	2.81	1.73	3.79
CONVENTIONALS								
Total solids (%)			69.9	46.1	79.4	73.5	71.3	69.8
Total volatile solids (%)			4.47	15.2	2.26	4.20	1.46	3.37
Total organic carbon (% dry weight)			3.5	5.7	0.24	4.2	5.9	3.3
Ammonia (mg/kg)			8.2	9.3	8.9	9.7	6.6	8.0
Total sulfides (mg/kg)			700	190	5.9	1,500	420	120
Percent fines			17.8	73.2	27.8	33.8	98.6	23.7

U = Value below stated detection limit.

* = Not normalized for total organic carbon.

[1] Detection limit above SQS.

[2] This value is not based directly on analysis. This value is the sum of all non-detected Aroclor isomers, and is above the SQS.

Boxed values are above SQS.

J = Estimated value

Table 2. Middle Waterway analysis results for PSDDA chemicals of concern not covered under State SQS.

CHEMICAL	PSDDA* SL	PSDDA* ML	A	B	C	D	E	A dup.
METALS (ppm; dry weight)								
Antimony	20	200	3.1	8.2	2.1	2.2	2.2	4.3
Nickel	140	--	36	52	40	33	40	40
ORGANICS (ppb; dry weight)								
CHLORINATED HYRDROCARBONS								
1,3-Dichlorobenzene	170	--	3 U	4 U	3 U	3 U	3 U	3 U
MISCELLANEOUS COMPOUNDS								
Hexachloroethane	1,400	14,000	26 U	29 U	18 U	23 U	21 U	23 U
VOLATILE ORGANICS								
Ethylbenzene	10	50	3 U	4 U	3 U	3 U	3 U	3 U
Tetrachloroethene	14	210	3 U	4 U	3 U	3 U	3 U	3 U
Trichloroethene	160	1,600	3 U	4 U	3 U	3 U	3 U	3 U
Xylenes	12	160	3 U	4 U	3 U	3 U	3 U	3 U
PESTICIDES (ppb; dry weight)								
Aldrin	10	--	5.6	2.6 U	1.1 U	2.8 U	3.2 U	3.4 U
Chlordane	10	--	3.1 U	2.6 U	1.1 U	2.8 U	3.2 U	3.4 U
DDD	6.9	69	5.2 U	4.2 U	1.1 U	4.6 U	5.2 U	5.7 U
DDE	--	--	5.3	3.4 U	1.8 U	3.7 U	4.2 U	6.0
DDT	--	--	10 U	8.5 U	1.4 U	9.3 U	10 U	11 U
Dieldrin	10	--	4.1 U	3.4 U	3.6 U	3.7 U	4.2 U	4.6 U
Heptachlor	10	--	3.1 U	2.6 U	1.4 U	2.8 U	3.2 U	3.4 U
Lindane	10	--	3.1 U	2.6 U	1.1 U	2.8 U	3.2 U	3.4 U

U = Value below stated detection limit

The following actions have been included in project design and implementation to avoid and minimize adverse impacts on the aquatic ecosystem during project construction:

- Providing broad openings and gentle contours to prevent erosion;
- Placing 750 feet of silt fence in the waterway to contain the excavation sediments and straw mulch on exposed slopes to minimize erosion;
- Salvaging pickleweed (*Salicornia virginica*), fleshy jaumea (*Jaumea carnosa*), and salt grass (*Distichilis spicata*) from the upper intertidal areas where construction disturbance will occur for use in project landscaping; and
- Removing surface debris from the existing mudflats on the project site.

If necessary, work conducted below the MHHW mark will also be limited to the six hours of low tide to minimize sediment discharge into the waterway.

The following actions have been included in project design and implementation to avoid and minimize adverse impacts on water quality that could otherwise result from the project:

- Dredging and removing the subsurface sediments containing elevated copper levels from the aquatic environment (approximately 160 cubic yards).

The area to be dredged for creation of the tidal channels will be overdredged by one foot and backfilled with clean Puyallup sand material excavated from elsewhere on the project site. The dredged subsurface sediments containing the elevated copper will be removed from the aquatic environment and blended with the regraded upland soils elswhere on the project site.

The following actions have been included in project design and implementation to assure the long-term success of the restoration project and similar restoration projects in Commencement Bay:

- Landscaping saltmarsh areas with native species documented to inhabit similar elevations on the project site or elsewhere in Commencement Bay;
- Experimenting with planted and unplanted areas to determine the relative success of different methods for establishing saltmarsh habitat in Commencement Bay; and
- Post-construction monitoring and adaptive management to maintain the restored habitat or change the habitat as necessary to meet habitat objectives.

6.2 CONSTRUCTION OF A VEGETATIVE BENCH

The construction of the vegetative bench is expected to result predominantly in positive impacts on the aquatic environment on the project site, including an increase in estuarine habitat valuable

to bird and aquatic life and cleaner substrate conditions than presently exist. At the same time this project element will result in the filling of about .23 acres of existing intertidal habitat on-sit and minor erosion and turbidity impacts.

The following actions have been included in project design and implementation to avoid an minimize adverse impacts on the aquatic ecosystem during project construction:

- Providing intertidal habitat elsewhere on the project site, resulting in an overal slight net increase of intertidal habitat on the project site;
- Placing 750 feet of silt fence in the waterway to contain the excavation sediment and straw mulch on exposed slopes to minimize erosion; and
- Salvaging pickleweed (*Salicornia virginica*), fleshy jaumea (*Jaumea carnosa*), an salt grass (*Distichilis spicata*) from the upper intertidal areas where constructio disturbance will occur for use in project landscaping.

If necessary, work conducted below the MHHW mark will also be limited to the six hours of lo tide to minimize sediment discharge into the waterway.

The following actions have been included in project design and implementation to assure the long term success of the restoration project and similar restoration projects in Commencement Bay:

- Experimenting with different substrates to determine the relative success o different methods for establishing saltmarsh habitat in Commencement Bay; and
- Post-construction monitoring and adaptive management to maintain the restore habitat or change the habitat as necessary to meet habitat objectives.

6.3 RESLOPING OF THE HEAD OF THE WATERWAY

The resloping of the head of the waterway is expected to result almost exclusively in positiv impacts on the aquatic environment on the project site, including an increase in riparian buffe habitat valuable to screening and protecting the remnant mudflat, cleaner substrate conditions tha currently exist, and isolation from the environment of possible contaminants in the metal debri that provided a source of potential contamination to the waterway. The only likely advers impacts on the aquatic ecosystem associated with this project element are minor erosion an turbidity impacts occurring during project construction.

The following actions have been included in project design and implementation to avoid an minimize adverse impacts on the aquatic ecosystem during project construction:

- Placing 750 feet of silt fence in the waterway to contain the excavation sediment and straw mulch on exposed slopes to minimize erosion;

- Placing geogrid or other geosynthetic reinforcement on the new face of the slope at the head of the waterway to prevent erosion of the outer slope; and

- Salvaging pickleweed (*Salicornia virginica*), fleshy jaumea (*Jaumea carnosa*), and salt grass (*Distichilis spicata*)from the upper intertidal areas where construction disturbance will occur for use in project landscaping.

If necessary, work conducted below the MHHW mark will also be limited to the six hours of low tide to minimize sediment discharge into the waterway.

The following actions have been included in project design and implementation to assure the long-term success of the restoration project and similar restoration projects in Commencement Bay:

- Post-construction monitoring and adaptive management to maintain the restored habitat or change the habitat as necessary to meet habitat objectives.

6.4 MONITORING AND ADAPTIVE MANAGEMENT

The Middle Waterway Shore Restoration Project is solely an environmental improvement or "restoration" project undertaken voluntarily in cooperation with the Natural Resource Trustees for Commencement Bay. It is not being implemented as part of a development project or as "mitigation" for a development project.

Expressed another way, the project is intended to result in a net increase of estuarine intertidal and saltmarsh habitats in Commencement Bay. It is not intended to compensate, under Section 404 of the Clean Water Act, for the loss of habitat resulting from a development project.

Simpson and the Trustees have worked together, and with other non-Trustee resource agencies, for almost a year to develop plans and a process for increasing the chances that the restoration project will succeed over the long-term. First, they have worked with restoration professionals to prepare restoration design standards suitable to the project site. For more information, see the Project Analysis (Parametrix, September 1993), the Excavation and Grading Plan (Parametrix, April 1994c) and the Planting Plan (Parametrix, April 1994d). Second, Simpson will record a deed restriction on the project site exclusive of the railroad right-of-way imposing use restrictions and other obligations on Simpson, its successors and assigns that are intended to ensure that the property provides habitat value in perpetuity in the Commencement Bay environment. Third, Simpson and the Trustees will enter into a cooperative agreement to address the long-term protection and maintenance of the project site. This cooperative agreement will include a monitoring and adaptive management plan (Parametrix, April 1994e) for the project site (see below). Finally, the Trustees will set aside a portion of the St. Paul settlement in a fund to cover the costs of any adaptive management actions that may be necessary on the project site.

Simpson successfully completed another shoreline habitat restoration project in 1988 on the St. Paul Waterway, in close proximity to the Middle Waterway Shore Restoration Project site (described in Weiner, January 1991). See Figure 1 for the location of the St. Paul habitat. Five

years of monitoring results for the St. Paul Waterway Area Remedial Action and Habitat Restoration Project indicate that the project provides habitat to diverse biological communities of benthic, epibenthic and macrophytic organisms (Parametrix, 1990; Parametrix, 1991a; Parametrix, 1991b; Parametrix, 1992; Parametrix, March 1994a). Shorebirds use the site for feeding and rearing, and tide pools observed at low tide are abundant with invertebrates. Productive shoreline habitat now exists at the St. Paul project site where there was essentially no productive habitat prior to project construction.

6.4.1 Project Monitoring

Monitoring for the Middle Waterway Shore Restoration Project is intended to provide information necessary for maintaining the newly-established estuarine habitat over time and valuable for planning future restoration projects in Commencement Bay. Monitoring of the restoration project site will include the following descriptive studies:

- Documenting the general development of estuarine habitat on the project site (through photopoints and aerial photographs);
- Documenting the general development of new intertidal and saltmarsh habitat substrates (through grain size analyses);
- Documenting trends in sediment chemistry, including whether or not contaminants from adjacent mudflat are transported to the new intertidal habitat resulting in contamination (through sediment chemistry analyses);
- Documenting trends in benthic fauna that may or may not correspond to changes in sediment grain size and chemistry (through biological analyses);
- Evaluating predictions regarding elevations and emergent saltmarsh establishment with actual high saltmarsh/low saltmarsh vegetation established onsite (through vegetative analyses and periodic measurement of elevations); and
- Documenting the general use of intertidal, saltmarsh and riparian habitats by wildlife (through qualitative wildlife surveys).

Monitoring of the restoration project site will also include the following experimental studies:

- Evaluating the effectiveness of hand-planting to establish estuarine intertidal low saltmarsh and high saltmarsh vegetation (through vegetative analyses);
- Evaluating the effectiveness of natural revegetation to establish estuarine intertidal emergent low saltmarsh and high saltmarsh vegetation (through vegetative analyses);

- Evaluating the natural revegetation of estuarine intertidal emergent vegetation on pumped Puyallup sands (through vegetative analyses); and

- Evaluating the natural revegetation of estuarine intertidal emergent vegetation on pumped Puyallup sands top-dressed with salvaged mudflat soils (through vegetative analyses).

Monitoring for the various physical, sediment, vegetation and wildlife usage parameters will vary according to the anticipated rate of change in the characteristics and will occur over a five-year period. Trustees will try to do more than is required under the plan, using funds gathered from other sources. Future monitoring will also be coordinated with EPA/Ecology cleanup plans for the Middle Waterway.

6.4.2 Adaptive Management

Because of the protected nature of the restoration project site and the absence of major sources of potential contamination, it is not anticipated that any adverse changes will rapidly occur on the site. Therefore, information necessary for adaptive management will be derived from the post-construction monitoring through routine reporting.

Anticipated changes or developments that may require adaptive management include:

- Failure of vegetation to establish or spread;

- Possible contamination of sediments above State SQS levels;

- Substantial erosion or sedimentation that adversely alters habitat characteristics; and

- Inclusion of treated stormwater flows into the constructed habitat.

Representatives from the Trustees and Simpson will meet at least annually to review monitoring results and to determine the need for adaptive management based upon their best professional judgment.

7. IDENTIFICATION AND EVALUATION OF PRACTICABLE ALTERNATIVES

All practicable actions developed during project planning and public review to reduce any identified adverse effects of the proposed dredging or filling activities have been incorporated into the proposed project (the preferred alternative). As proposed, the project will result almost exclusively in positive impacts on the aquatic environment on the project site, including removal of a potential source of contaminants to the aquatic environment, generally cleaner substrate conditions than presently exist, and an increase in estuarine habitat valuable to bird and aquatic life and screened from adjacent industrial uses. The only likely adverse impacts on the aquatic

ecosystem associated with the project are minor erosion and turbidity impacts occurring during project construction.

There are no other practicable alternatives to the proposed project. The project overview provided in the Project Analysis (Parametrix, September 1993) discusses the planning context for the project and the selection of the Middle Waterway site as the preferred location for the restoration project. The Trustees, Simpson and Champion identified no other location in Commencement Bay that would meet the main project objective of increasing valuable estuarine habitat within Commencement Bay in perpetuity at a location functionally related to the previously constructed Kraft Mill habitat, the Puyallup delta, and other nearby intertidal and shallow subtidal habitat, and also result in less impact on the aquatic ecosystem. The Trustees, Simpson and Champion also identified no other alternative project design at the project location that would meet this project objective as well as the preferred alternative.

The project helps to implement and is consistent with the restoration goal and principles of the Trustees and the Commencement Bay NRD Restoration Panel (1992-1993) and the U.S. Army Corps of Engineers Cumulative Impact Studies for Commencement Bay (David Evans and Associates, 1991; Shapiro and Associates, 1992). The project also helps to implement and is consistent with the vision and restoration and land use goals and principles of the Commencement Bay Cleanup Action Committee (CBCAC, November 1993), the CBCAC Commencement Bay Watershed Restoration Landscape Concept Plan (CBCAC, November 1993), and other efforts in Commencement Bay and the Lower Puyallup Watershed.

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Appendix A

MEMORANDUM

to: Don Weitkamp, Ph.D. April 27, 1994

from: Tom Bourque, P.E. 55-1650-30

re: Middle Waterway Shore Restoration Project - Planning Level Grading Construction

Grading Construction

A planning level cost estimate analysis for the Middle Waterway Wetland Restoration grading construction has been completed. This analysis considers site preparation, excavation, dredging, off-site hauling, final grading, erosion control, and off-site stockpile regrading and stabilization. Cost estimates are based on *Means Heavy Construction Cost Data - 1993* and Parametrix' experience in construction services. Excavation, dredging, and disturbed area estimates are based on preliminary estimates presented in the *Project Analysis - Middle Waterway Shore Restoration Project (September 1993)*. Presented below is a summary table of the grading construction cost estimate. Totals have been rounded to the nearest one-hundred dollars.

Simpson Tacoma Kraft Company - Middle Waterway Share Restoration Project
Planning Level Cost Estimate for Site Grading

Item	UnitPrice	Quantity	Total
Mobilization	$10,000	1	$10,000
Site Preparation	$725/AC	3.5	$2,500
Excavation (above water line)	$5/CY	7,900	$39,500
Dredge (below water line)	$10/CY	600	$6,000
Embankment	$4/CY	550	$2,200
Final Site Grading	$750/AC	3.5	$2,600
Access Road with Rock Pad	$9,000	1	$9,000
Erosion Control	$4,500	1	$4,500
Off-Site Stockpile Regrade	$4/CY	7,900	$31,600
Hydroseed	$2000/AC	1.5	$3,000
		Subtotal	$110,900
		Contingency(25%)	$27,700
		Total	$138,600

* This planning estimate is considered accurate between -20% and +30% of the actual costs.

Note: Costs associated with excavating and containing the metal debris at the head of Middle Waterway are discussed in Attachment A.

The overall project consists of excavating and contouring the site's upland portion to restore the natural shoreline and to plant appropriate natural vegetation to establish wetlands and a riparian upland buffer. Restoration will occur on 3.3 acres. The grading configuration will create a small protected inlet and shoreline similar to local tideflat areas and linear shaped uplands.

Approximately 7900 cubic yards will be excavated and 600 cubic yards dredged during restoration. Approximately 550 cubic yards of the excavated material will be placed in the existing site mudflat to construct a vegetation bench. The remaining excavated and dredged material will be hauled off-site to a stockpile area for regrading and stabilization.

Presented below are each cost item's description and assumptions.

Mobilization

Mobilization is assumed at about ten percent of the total project cost.

Site Preparation

Site preparation includes 3.3 acres of light clearing and grubbing of the project area and 0.2 acres of access road.

Excavation

Excavation assumes standard excavation of 7900 cubic yards of moist silt and sand above the high water mark. After excavation the soil would be hauled one-half mile to a stockpile area. It is assumed trucks would haul the material at a rate of three trips per hour and 600 cubic yards per day.

Dredge

Dredging assumes removing 600 cubic yards of saturated silt and sand below the high water line. Material is assumed to be hauled off-site at a rate of 280 cubic yards per day. In addition, 160 yd^3 of copper-containing subsurface sedients will be dredged.

Embankment

Embankment construction will produce a vegetation bench that extend into the existing site mudflat. This filling and compaction will be limited to about 550 cubic yards. A dozer will place and compact the embankment material.

Final Site Grading

Final site grading will be performed by a dozer. One acre is assumed because only the shore slope will require finish grading. The remaining area will be graded during the site preparation. The construction sequence is described in Attachment B.

Access Road

The site access road will be 15 feet wide and 300 feet long. The road will run the length of the construction area and intersect the site entrance rock pad (see Erosion Control). The road would be constructed of twelve-inch thick quarry spall base. This road is assumed to be included; however, it may not be required depending on the site conditions.

Erosion Control

Two elements of erosion control will be utilized on the site. First, 750 feet of silt fence will be placed in the waterway to contain excavation sediments. Once the project is complete the fence will be removed. Second, straw mulch will be placed on exposed slopes until vegetated.

A 100-foot long, 15-foot wide, and 1-foot thick quarry spall pad will be placed at the site exit to shake mud and debris off the trucks before they leave the site. This pad will intersect Middle Waterway Road at the north end of the site. Construction of the pad is required by the county.

Off-site Stockpile Regrade and Hydroseeding

Once excavated material has been hauled to an off-site location it will be regraded and hydroseeded for erosion stability. Grading and hydroseeding may be delayed if the material requires additional dewatering. A dozer will grade the material in a three-foot lift.

Contingency

The contingency attempts to account for unknown site conditions and changes between the planning documents and the final grading plan.

cc: Rick Hermes
Jim Kelly

ATTACHMENT A

MEMORANDUM

to: Don Weitkamp, Ph.D. April 27, 1994

from: Tom Bourque, P.E. 55-1650-30

re: Middle Waterway Debris Excavation and Containment

UBAT sampling in 1993 identified brass foundry debris and soil along the east bank of the head of the Middle Waterway within the Middle Waterway habitat restoration project site. Testing of the brass foundry metal debris under the Toxicity Characteristic Leaching Procedure (TCLP) has shown the metals in the debris to be considerably below state dangerous waste (DW) and extremely hazardous waste (EHW) levels, and therefore not requiring removal to an appropriate landfill offsite. See Figure 1 (for approximate TCLP sampling locations) and Table 1 (for TCLP sampling results). Because these materials exceeded SCOs for a number of constituents, though, excavation with on-site containment was determined to be the preferred option in handling this material. Assumptions, remediation alternatives, and costs addressing this preferred option are presented below.

Assumptions

The brass foundry debris is assumed to be primarily the consistency of soil (approximately 1% to 5% debris with the remainder soil). The debris is assumed to be up to two feet in diameter. Neither material would require dewatering before placement within the containment system.

Testing of these materials and the waterway suggest that leaching of metals from the debris has not been a problem relative to those contaminants found in the local area. As a result, treatment or stabilization before confinement is assumed to be unnecessary.

On-site confinement of the debris would be allowable on the upland portions of the project site. No bottom liner, leachate collection system, or monitoring system would be required.

Groundwater is assumed to be at approximately +12 MLLW.

Excavation and confinement of the debris is assumed to be covered under the SEPA review and restoration construction permits for this project.

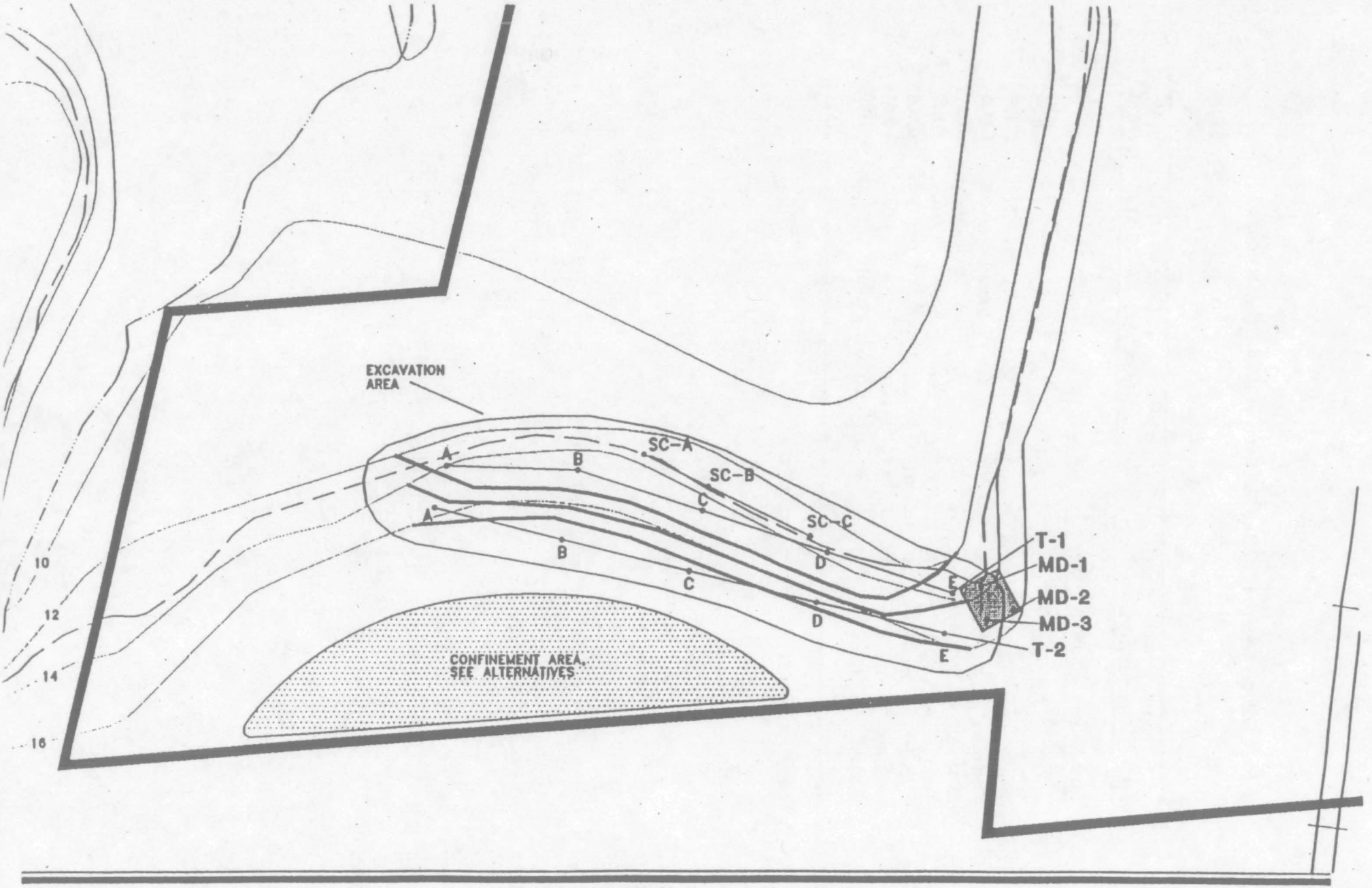

EXCAVATION AREA
SC-A
SC-B
SC-C
A
B
C
D
E
T-1
MD-1
MD-2
MD-3
T-2
10
12
14
16
CONFINEMENT AREA, SEE ALTERNATIVES
High Water Line
Excavation Contour Lines
Existing Contour Lines
0
15
30

Figure 1

Table 1. Middle Waterway Upland Soil Samples - TCLP Metals Results

Composite Number				T-1	T-2	SC	MD
Date Sampled				3/18/94	3/18/94	3/18/94	3/18/94
Analyte	Units	EHW Limit	DW Limit				
Arsenic	mg/L	500	5	<0.05	<0.05	<0.05	<0.05
Barium	mg/L	10,000	100	0.715	0.600	0.178	0.365
Cadmium	mg/L	100	1	0.004	0.002	<0.002	0.006
Chromium	mg/L	500	5	<0.005	<0.005	<0.005	<0.005
Lead	mg/L	500	5	0.03	0.05	0.05	0.02
Mercury	mg/L	20	0.2	<0.0001	<0.0001	<0.0001	<0.0001
Selenium	mg/L	100	1	<0.05	<0.05	<0.05	<0.05
Silver	mg/L	500	5	<0.003	<0.003	<0.003	<0.003

Note: All samples are composite samples.

Excavation

The amount of excavated soil and brass foundry debris would be approximately 150 cubic yards of material. The excavation along the east bank would be above the flat shoreline as it approaches the embankment (approximately +12 MLLW) and would remove a five foot deep, ten foot wide, and 80 foot long cut along the shore. The excavation would be performed by a tracked excavator. Material would be piled behind the excavator and then moved to and placed at the containment area by a front-end loader.

The excavation would have near-vertical cut-slopes and may be adjusted as the work proceeds and the debris materials exposed. Once the debris and soil have been removed, clean on-site material would fill the excavation back to pre-existing grades or more gradual slopes. The fill's outer slope would not exceed 2:1 (H:V). Two measures which may be considered for protecting the fill's outer slope would be:

- Place one to two foot diameter rip-rap at the slope toe and horizontal logs up the slope to its crest. The logs would be side-by-side and connected by cable or other means. The rip-rap may be replaced by logs if the concern for slope stability and erosion by wave-action is minor.

- Place geogrid or other geosynthetic reinforcement on the face and revegetate. This method provides less wave-action protection, but may be more compatible with the site's restoration.

Excavation would need to employ the project's erosion control plan. In addition, consideration should be given as to the timing of excavation. That is, limiting work below the MHHW mark to the six hours of low tide to minimize sediment discharge into the waterway. If restoration permits allow for construction during high tide than this precaution may not be necessary.

Confinement

Three alternatives are evaluated for confining the excavated debris and soil. These alternatives include: (1) confinement within a berm; (2) confinement within a trench; and (3) confinement on-grade. The three confinement alternatives utilize a simple liner, either plastic (30 mil PolyVinyl Chloride) or one-foot of clay. The reason for the liner is to avoid monitoring the confinement and to ensure permanent confinement. All confinement areas would be located within the immediate area of the debris excavation. Attached are figures which show the excavation grades and confinement location and cross-sections (Figures 2 through 4).

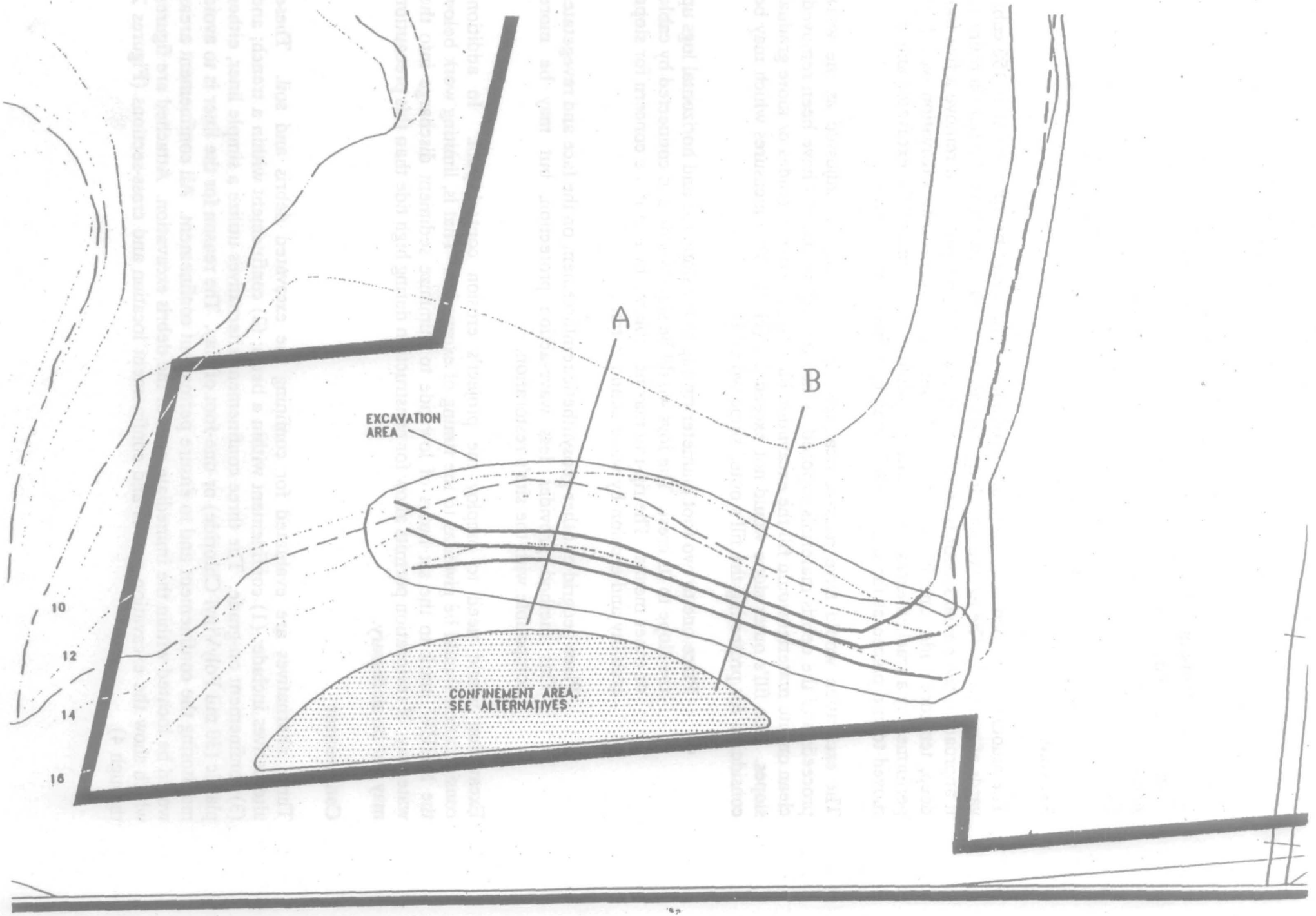


Figure 2.
Debris Material Excavation

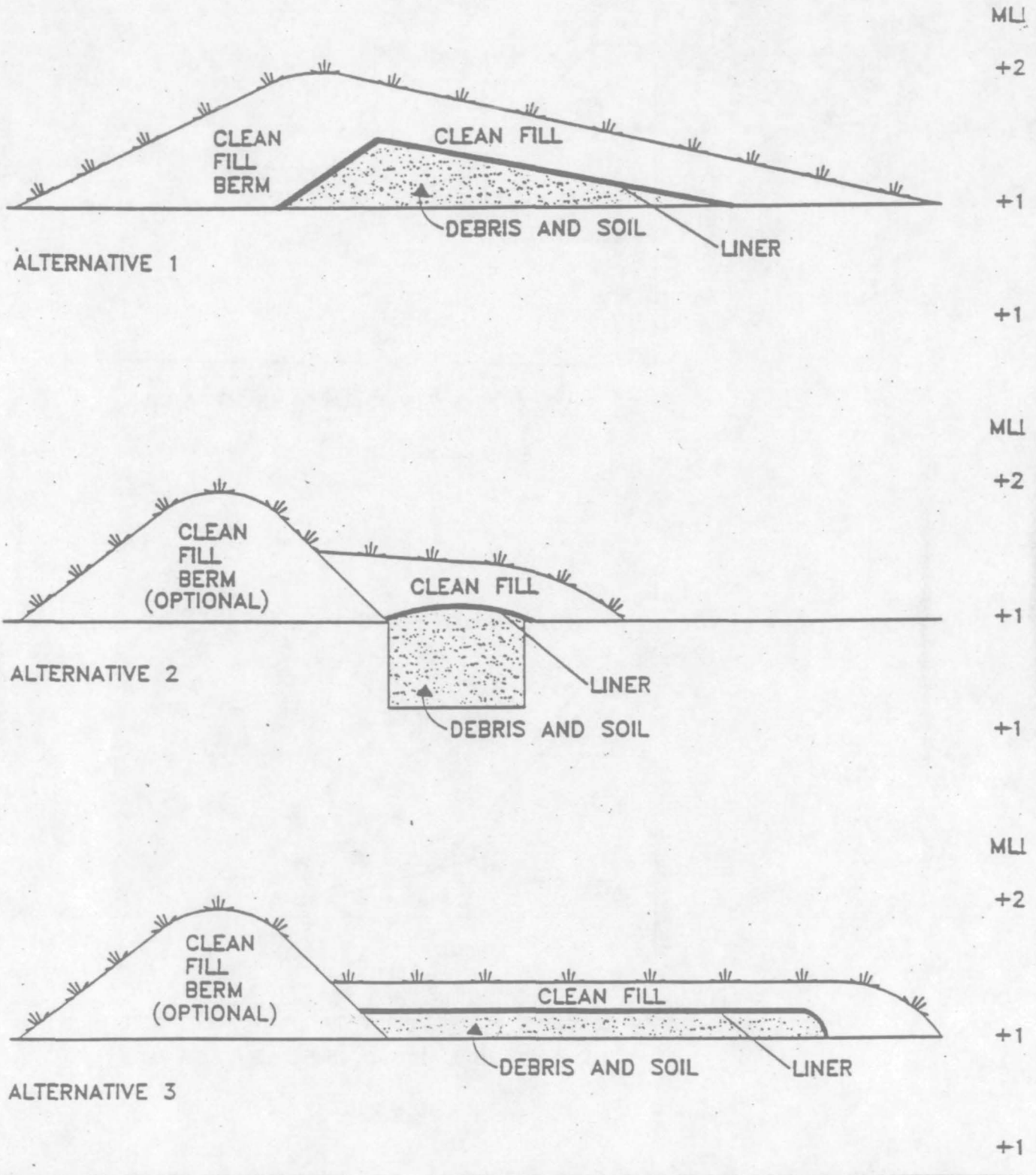
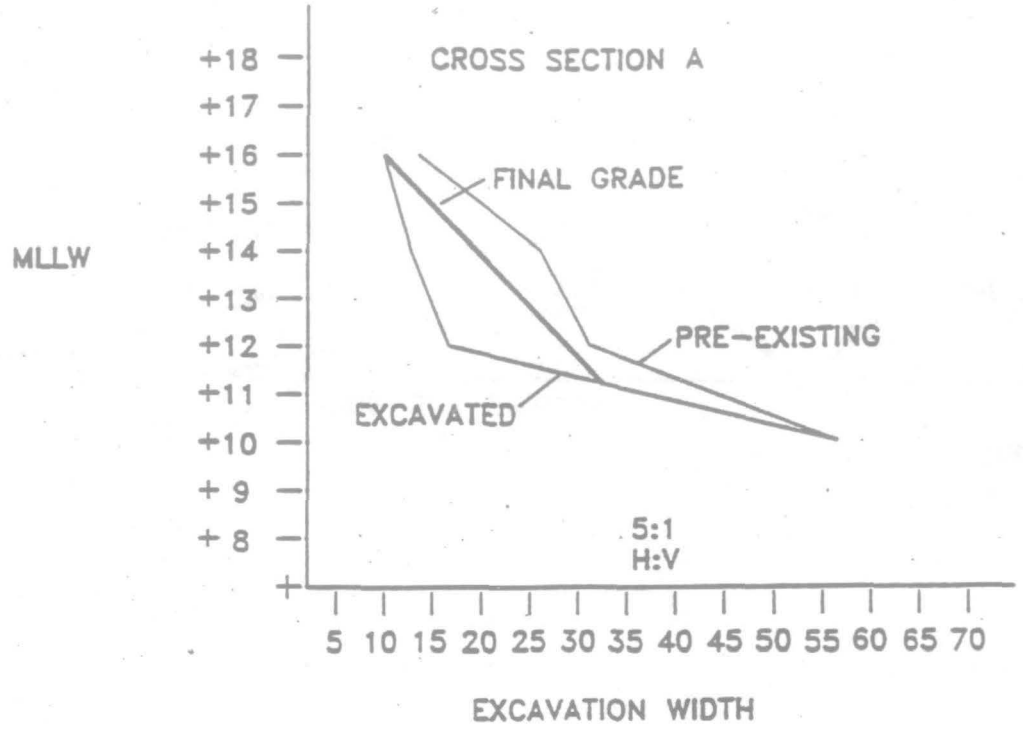


Figure 3.
Confinement Alterna



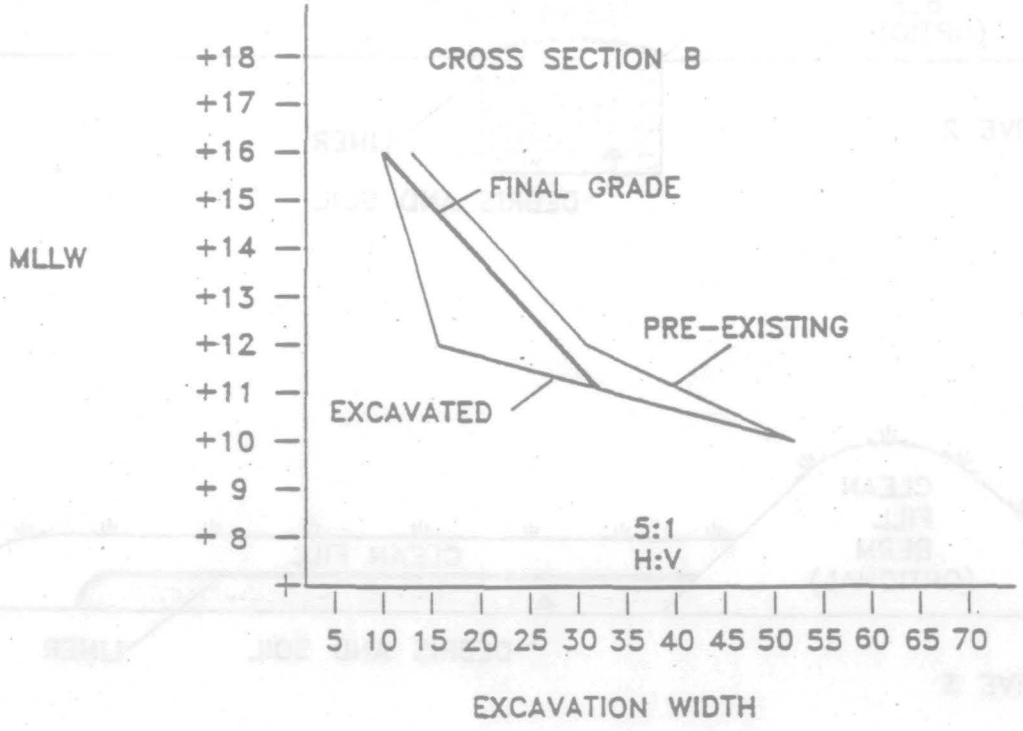


Figure 4.
Excavation Cross Section

Alternative 1 - Berm Construction

Excavated debris and soil materials would be placed along the property line adjacent to 11th Street as part of a berm construction. The berm would be approximately 15 feet wide, 5 feet high, and 125 feet long with 2:1 sideslopes. The debris material would be placed first at 5-15 feet wide and 3 feet high. A plastic liner or one foot clay layer would be placed over the debris and soil material. Clean on-site fill at least two feet thick would be placed over the liner. Finally, the berm would be vegetated.

This alternative is preferred. It provides the easiest construction because only an excavator and front-end loader would be required and the berm construction would be simple and fast. The loader would place and compact both fill materials with its bucket.

Alternative 2 - Trench

Along the berm alignment (alternative 1) a trench would be excavated approximately 100 feet long, 5-15 feet wide, and 5 feet deep. The debris and soil material would be placed in the trench and capped with a plastic or clay liner, two feet of soil, and vegetated. Excess clean soil would be utilized for the berm adjacent to the trench and vegetated.

This alternative provides the best confinement for the soil and debris material. However, the excavator would need to excavate a large trench and the loader would have to still shape a berm.

Alternative 3 - On-Grade Confinement

Debris and soil material would be utilized as part of the site grading, but still remain isolated by a plastic or clay liner. At two feet deep, the debris and soil material would require an area of approximately 2,000 square feet.

This alternative avoids berm construction and may assist in reaching the proposed project grades. However, a larger area requires lining. An excavator and dozer would be required and, perhaps, a loader depending on where the debris and soil material would be placed.

Confinement Cost Estimates

The confinement cost estimates (Table 2) are for planning purposes only. The costs are based on typically construction unit prices and estimated quantities. Actual costs and quantities may vary. It is assumed that the equipment would be available from the other activities occurring on-site.

Table 2. Confinement Alternative Preliminary Cost Estimates.

ITEMS	QUANTITY	UNIT PRICE	TOTAL
ALTERNATIVE 1			
Excavator	2 DAYS	$800/DAY	$1,600
Loader	1.5 DAYS	$750/DAY	$1,125
Liner (PVC)	175 SY	$3.5/SY	$610
Liner (Clay)	75 CY	$12/CY	$900
Contingency (25%)			$850
TOTAL			$4,185
ALTERNATIVE 2			
Excavator	3 DAYS	$800/DAY	$2,400
Loader	1.5 DAYS	$750/DAY	$1,250
Loader (PVC)	100 SY	$3.5/SY	$350
Liner (Clay)	35 CY	$12/CY	$420
Contingency (25%)			$950
TOTAL			$4,825
ALTERNATIVE 3			
Excavator	2 DAYS	$800/DAY	$1,600
Loader	1 DAY	$750/DAY	$750
Dozer	1 DAY	$750/DAY	$750
Liner (PVC)	225 SY	$3.5/SY	$790
Liner (Clay)	110 CY	$12/CY	$1,320
Contingency (25%)			$925
TOTAL			$4,815

Note:

(1) The clay liner is not considered because it is assumed more costly.
(2) Vegetating the confinement area is considered incidental to the project.

Table 3. Bank Reconstruction Preliminary Cost Estimates.

ITEMS	QUANTITY	UNIT PRICE	TOTAL
Excavator	3 DAYS	$800/DAY	$2,400
Dozer	2 DAYS	$750/DAY	$1,500
Dump Truck	1 DAY	$500/DAY	$500
Laborers (2)	8 DAYS	$300/DAY	$2,400
Subtotal			$6,800
Logs	15	$20/EA	$300
Rip-Rap	20 CY	$25/CY	$500
Geogrid	60 SY	$5/SY	$300
Contingency (25%) Logs/Rip-Rap			$1,900
Contingency (25%) Geogrid			$1,800
TOTAL (Logs/Rip-Rap)			$9,500
TOTAL (Geogrid)			$8,900

Note:

(1) Revegetation is considered incidental to the project.

(2) On-site fill would be placed near the reconstruction area, loader and dozer will place the material in the excavated area, and then the loader and laborers would construct the log/rip-rap or geogrid reinforced outer slope. If geogrid is used, the loader's time will probably be less than shown.

Summary

Each confinement alternative would allow confined debris on-site. Liner would provide protection from precipitation. Alternative 1 is selected because it provides adequate containment for the metal debris and soil at the lowest cost. The total cost for excavation and reconstruction under Alternative 1 using the less expensive materials would be in the neighborhood of $13,085. This estimate is considered to be +30 and -20 percent of the actual cost. This alternative would require the restoration project to provide the clean berm material, which may add to the total cost (1 Dump truck and 1 excavator for one day - $1,500). This cost also assumes the use of geogrid instead of logs/rip-rap. Geogrid was selected because of cost and the intent of the restoration project to provide vegetated slopes down to the water.

ATTACHMENT B

CONSTRUCTION SEQUENCE

1. Access to project site will be established near the center of the site, and the site will be graded in three phases.

2. Grading will start on the northern third of the site (Phase I) and proceed south towards the center. Following completion of grading on Phase I, Phase II (the south third) will be graded from south to north. Finally, the center portion (Phase III) of the site will be graded.

   Each phase will include appropriate erosion control procedures, as identified in the grading plans.

4. Immediately following grading of the northernmost 50 feet of the project, a storage area will be established for intertidal plants. Plants will be dug from intertidal areas and stored in plastic pools, partially filled with seawater.

5. Within each phase, plants will first be salvaged from intertidal zones. Excavation in new intertidal areas to about 13 feet MLLW will then occur.

6. Next, final grades will be established in intertidal areas (including overexcavation and backfilling with intertidal sediments, where specified).

7. Finally, final grades in upland buffer areas will be established.

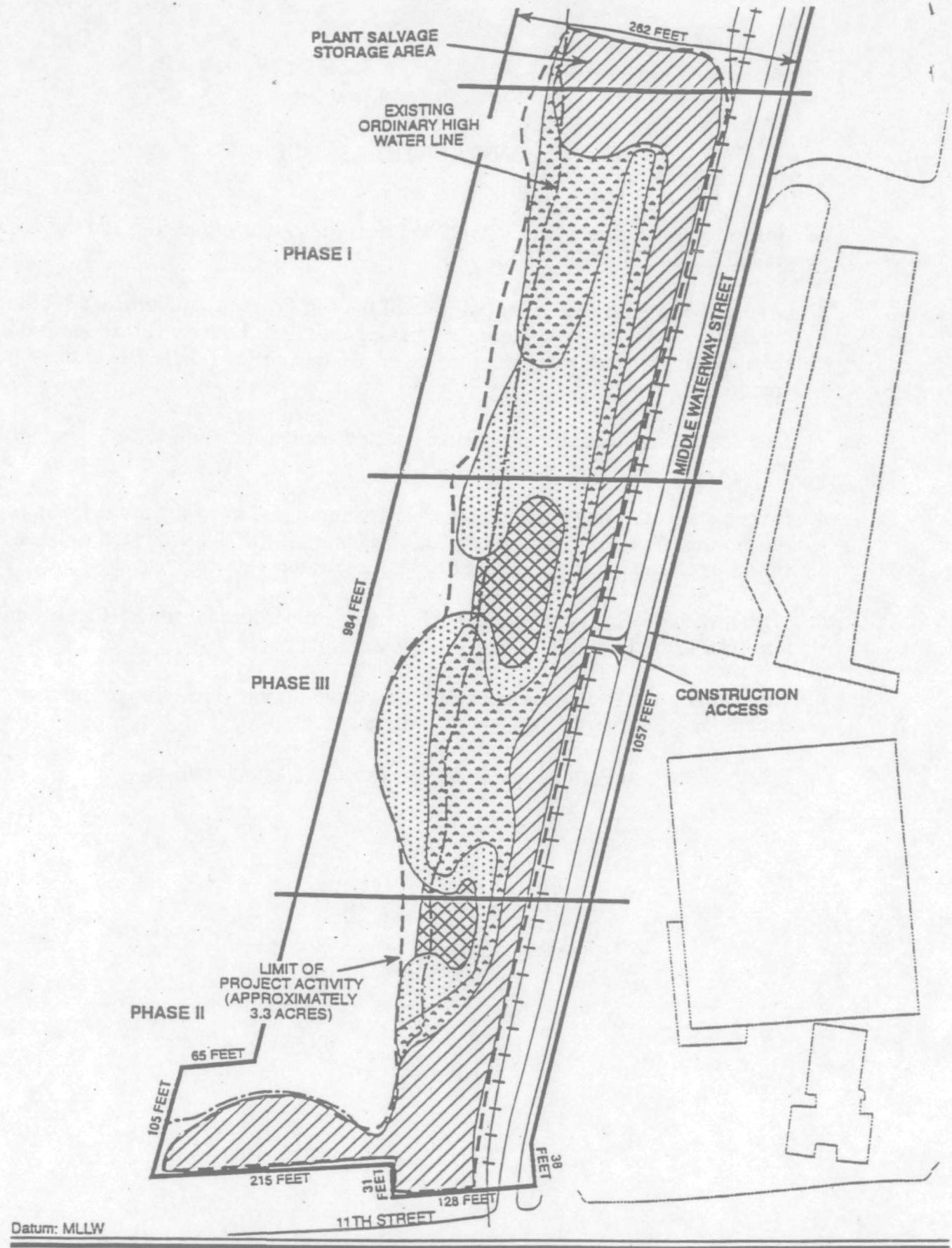


Figure 1.
Construction Ph
Middle Waterwa
Shoreline Resto

EXHIBIT E

RESTORATION PROJECT DELIVERABLES

1. Project Analysis (September 1993, April 1994)
2. City of Tacoma Shoreline Substantial Development Permit Application (September 1993)
3. U.S. Corps of Engineers Section 10/404 Permit Application (December 1993)
4. City of Tacoma Excavating and Grading Permit Application (August 1994)
5. Pre-Construction Sampling Plan (March 1994)
6. Report on Pre-Construction Sampling Results (April 1994)
7. Final Design Plan for Excavation and Grading (May-June 1994)
8. Final Design Plan for Planting (May-June 1994)
9. Final Design Plan for Removal or Containment of Brass Foundry Metal Debris (May-June 1994)
10. Monitoring and Adaptive Management Plan (April 1994)
11. As-Built Construction Drawings
12. Monitoring Reports

SCHEDULE 1

TERMS AND CONDITIONS REGARDING COMPENSATION FOR THE VALUE OF THE RESTORATION PROPERTY AND REIMBURSEMENT OF RESTORATION PROJECT EXPENSES

1. The Trustees will pay $625,000.00 to Simpson as compensation for the diminution in value of the Restoration Property as a result of Simpson's obligations under the Cooperative Agreement, including Simpson's incurring of otherwise unreimbursable expenses in association with the design, selection and implementation of the Restoration Project, the placement of the Deed Restriction on the Restoration Property, and Simpson's agreement to continue to pay the property tax liability allocable to the Restoration Property.

2. The Trustees will pay $165,843.16 to Simpson as reimbursement for Simpson's out-of-pocket costs in completing the first four phases of the Restoration Project (planning design, permitting, sampling and final project design), as documented in invoices attached to a letter from Simpson to the Trustees, dated February 1, 1995.

3. The Trustees will pay Simpson's reasonable out-of-pocket costs, as described in invoices provided by Simpson to the Trustees at least thirty (30) days in advance of the requested date of payment, in completing the final two phases of the Restoration Project (construction and planting and post-construction monitoring). The estimated costs for construction and planting are approximately $250,000.00. The estimated costs for post-construction monitoring are approximately $125,000.00.

4. The Trustees will take all necessary steps to request disbursement from the Court Registry Account of the funds identified in paragraphs 1-3 of this Schedule 1 as follows:

   a. $125,000.00 within thirty (30) days of the initiation of construction of the Restoration Project;

   b. $150,000.00 on or before December 31, 1995;

   c. The balance of any amount due and owing under this Schedule 1 on or before June 30, 1996; and

d. Any further amounts due and owing within thirty (30) days of the Trustees' receipt of invoices from Simpson describing such costs as a consequence of work under this Schedule 1 undertaken after June 30, 1996.

Except for subparagraph 4.a, the Trustees will not be required to make any payment described above by the date described above if Simpson and the Trustees mutually agree to defer such payment because a Commencement Bay-wide Natural Resource Damage settlement agreement involving Simpson and the Trustees is still pending with the court. Any payment made to Simpson under this paragraph will be credited to the Trustees in the event that a Commencement Bay-wide Natural Resource Damage settlement agreement involving Simpson and the Trustees is entered by the court.